



2013 ♥ 2014



UNDER GRADUATE CALENDAR

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Communication of Information to Provincial Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie

Under the terms of an agreement between Concordia University and the provincial Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie, approved by the Quebec Access to Information Commission, Concordia University is required to transmit to the Ministry some or all of the following information concerning its students: the student's permanent code, complete name, date of birth, gender, father's complete name, mother's complete name and place of birth. This information is being transmitted, at the Ministry's request, in order to provide the Ministry with the tools to properly calculate funding for Concordia University, for planning purposes and to ensure the proper management of public funds.

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Undergraduate Calendar

2013-2014



CONCORDIA UNIVERSITY

Mission

Concordia University is welcoming, engaged, and committed to innovation and excellence in education, research, creative activity and community partnerships. It dares to be different and draws on its diversity to transform the individual, strengthen society and enrich the world.

Vision

Concordia's vision is to rank among Canada's top five comprehensive universities within the next decade, and to be a first choice for students and faculty locally, across Canada, and internationally in a wide variety of defined areas of research and study.

Values

Concordia's core values stem from those long prized by its founding institutions. Concordia has adopted the motto of the city of Montreal, *Concordia salus*, which speaks to well-being through harmony. The union of two very different institutions of higher education has led to an exceptionally successful synthesis of compatible and timely values.

Excellence

Concordia values the curiosity and engagement of its faculty, staff, and students. Curiosity about the world around us, respectful engagement with those who inhabit it, and strong determination to improve it lead to productive exploration of current understandings, a rich spectrum of creative activity and practice, and the creation and dissemination of new knowledge.

Opportunity

Concordia values the openness and respect necessary to provide opportunities to a highly diverse student and faculty population. Diversity at Concordia is interpreted broadly: for example, in addition to embracing diversity in ethnicity, gender, language, and accessibility, Concordia provides students with different and original ways of exploring their interests. Enabling faculty, staff and students to make a progressive impact on their world in ways that respect and engage the uniqueness of each individual is a hallmark of Concordia.

Quality of Life

Concordia values a secure and respectful learning environment and workplace. Concordia is committed to promoting a healthy, safe and sustainable campus and to enhancing the quality of life of the community in which we live.

The Undergraduate Calendar is an official University document.

It defines academic programs and the regulations that pertain to them. The University Senate reserves the right to modify the academic programs and regulations at its discretion after the posting date of the Calendar. In addition, the University reserves the right to modify the posted scale of tuition and other student fees and to limit the number of students who enrol in any program or course at any time before the beginning of an academic term. Moreover, the information contained in the Undergraduate Calendar or any other University document related to academic programs, deadlines, and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

Not all courses listed in this Calendar are offered this year. Students are advised to consult the Undergraduate Class Schedule for a timetable of courses offered.

Please note that the Undergraduate Calendar is available solely online and constitutes the official Undergraduate Calendar of the University. The most recent version of the Calendar is the only version currently in effect. Students are responsible for ensuring that graduation requirements are met, in accordance with the requirements set out in the Calendar corresponding to the year of admission, except for Engineering programs. Students in the Engineering programs are required to graduate having met the substantial equivalent of the curriculum in force in the winter term prior to degree conferral. Archived Calendars may be consulted using the “Archived Calendars” link.

This Calendar is intended to assist readers to understand the academic and administrative structure and policies and procedures of the University, and to describe the academic programs offered. The material has been submitted by academic units and administrative departments. Every effort has been made to ensure that all general information and course references are accurate as of the date of posting, but these are subject to possible verification and correction. By the act of registration each student becomes bound by the policies and regulations of Concordia University, including the Faculty in which the student is registered. Students are responsible for familiarizing themselves with the general information, rules and regulations contained in the Calendar, and with the specific information, rules and regulations of the Faculty or Faculties in which they are registered or enrolled or seek registration or enrolment, as well as the specific requirements of each degree or certificate sought. It is the student’s responsibility to ensure that the courses chosen are appropriate to the program requirements.

Concordia University disclaims all responsibility and liability for loss or damage suffered or incurred by any student or other party as a result of delays in or termination of its services, courses, or classes by reason of force majeure, including fire, flood, riots, war, strikes, lock-outs, damage to University property, financial exigency and/or other events beyond the reasonable control of the University. Concordia University disclaims any and all liability for damages arising as a result of errors, interruptions or disruptions to operations or connected with its operations or its campuses, arising out of computer failure or non-compliance of its computing systems.

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About the University

Concordia University is one of the largest urban universities in Canada. It has two campuses — one in downtown Montreal (Sir George Williams), the other in a residential setting in the city's west end (Loyola).

Established in 1974 with the merger of Loyola College and Sir George Williams University, Concordia University offers over 500 graduate and undergraduate programs in four Faculties (Arts and Science, John Molson School of Business, Engineering and Computer Science, and Fine Arts) and two Schools (the School of Graduate Studies and the School of Extended Learning). At the undergraduate level, the University offers BA, BAdmin, BComm, BCompSc, BEd, BEng, BFA, and BSc degrees, as well as certificate programs.

For graduate programs, please see graduatestudies.concordia.ca/publications/graduatecalendar.

For more information about the University, its history and its founding institutions, please see concordia.ca/about.

Gender Neutral Degree Nomenclature

Students may choose to graduate with degree titles that are gender neutral and refer to the diplomas themselves (Baccalaureate, Magisteriate, and Doctorate) or with the traditional nomenclature (Bachelor, Master, and Doctor).

Graduates who have previously been awarded a Concordia degree with the traditional nomenclature may request that their degree be re-issued in the gender neutral nomenclature.

Academic Calendar

Section 11

The Academic Calendar is subject to change. Updated information will be available from the Birks Student Service Centre. For dates pertaining to registration and non-standard summer terms, please consult the 2013-14 online Undergraduate Class Schedule or the Birks Student Service Centre. For financial deadlines see concordia.ca/admissions/tuition-and-fees.

Deadlines falling on weekends* or holidays will be extended to the next working day.

**Except for academic withdrawal deadlines.*

REGULAR SESSION 2013-14 AND SUMMER SESSION 2013

2013

MARCH	Friday, March 1	Last day for application to undergraduate programs — Full-time regular session 2013-14.
	Sunday, March 10	Last day for academic withdrawal from two-term and winter-term courses.
	Friday, March 29	University closed (see April 15, 2013).
	Saturday, March 30	University closed (see April 15, 2013).
	Sunday, March 31	University closed.
APRIL	Monday, April 1	University closed (see April 16, 2013).
	Monday, April 1	Last day to apply for Quebec resident status for winter term 2013.
	Saturday, April 6	Last day for instructor-scheduled tests or examinations.
	Saturday, April 13	Last day of classes — Regular session 2012-13.
	Monday, April 15	Make-up day for classes scheduled on March 29 and 30 — Instructors must contact Scheduling Office to book a classroom.
	Tuesday, April 16	Make-up day for classes scheduled on April 1 — Instructors must contact Scheduling Office to book a classroom.
	Wednesday, April 17	Examinations begin.
MAY	Tuesday, April 30	Examinations end.
	Wednesday, May 1	Two-term and first-term summer session begins.
	Wednesday, May 8	Deadline for withdrawal with tuition refund from two-term and first-term summer session courses.
	Wednesday, May 8	Last day to add two-term and first-term summer session courses.
	Wednesday, May 15	Last day to apply for late completion of courses ending in April 2013.
	Wednesday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2013.
	Monday, May 20	Victoria Day — University closed.
	Wednesday, May 29	Last day for academic withdrawal from first-term summer session courses.
	Thursday, May 30	Last day for submission of late-completion work for courses ending in April 2013 (application deadline May 15).

JUNE	T.B.A.	Spring convocations.
	Saturday, June 15	Last day to apply for supplemental examinations for courses taken during the regular session 2012-13.
	Saturday, June 15	Last day to apply for re-evaluation of courses ending in April 2013.
	Monday, June 17	Last day of classes — First-term summer session.
	Tuesday, June 18	Mid-term break for two-term summer session begins.
	Tuesday, June 18	Examinations begin — First-term summer session finals.
	Monday, June 24	Fête Nationale — University closed.
	Wednesday, June 26	Examinations end — First-term summer session finals.
	Wednesday, June 26	Mid-term break for two-term summer session ends.
	Thursday, June 27	Classes begin — Second-term summer session and special three- or six-week summer session.
JULY	Monday, July 1	Canada Day — University closed.
	Thursday, July 4	Deadline for withdrawal with tuition refund from second-term summer session and first-term special three- or six-week summer session courses.
	Thursday, July 4	Last day to add second-term summer session and special three- or six-week summer session courses.
	Wednesday, July 10	Last day for academic withdrawal from special three-week summer session courses.
	Monday, July 15	Last day to apply for fall 2013 graduation.
	Monday, July 15	Last day for academic withdrawal from two-term summer session courses.
	Thursday, July 18	Last day of classes — First-term special three-week summer session.
	Friday, July 19	Classes begin — Second-term special three-week summer session.
	Tuesday, July 23	Last day for academic withdrawal from special six-week summer session courses.
	Friday, July 26	Last day to register for second-term special three-week summer session courses.
	Friday, July 26	Deadline for withdrawal with tuition refund from second-term special three-week summer session courses.
	Monday, July 29	Last day for academic withdrawal from second-term summer session courses.
	Wednesday, July 31	Last day for academic withdrawal from second-term special three-week summer session courses.
AUGUST	Thursday, August 1	Last day to apply for Quebec resident status for summer session 2013.
	Thursday, August 8	Last day of classes — Special six-week and second-term special three-week summer session courses.
	Tuesday, August 13	Make-up day for classes offered once a week on Monday during two-term summer session — Instructors must contact Scheduling Office to book a classroom.

	Wednesday, August 14	Last day of classes — Two-term and second-term summer session courses.
	Thursday, August 15	Make-up day for classes offered once a week on Tuesday during two-term summer session — Instructors must contact Scheduling Office to book a classroom.
	Friday, August 16	Examinations begin — Two-term and second-term summer session finals.
	Thursday, August 22	Examinations end — Two-term and second-term summer session finals.
	Friday, August 23	Replacement and supplemental examinations begin — Regular session 2012-13.
	Thursday, August 29	Replacement and supplemental examinations end — Regular session 2012-13.
	Saturday, August 31	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses taken during the summer session 2013.
SEPTEMBER	Sunday, September 1	Last day to apply for late completion of courses taken during the summer session 2013.
	Monday, September 2	Labour Day — University closed.
	Tuesday, September 3	Classes begin — Day and evening regular session.
	Sunday, September 15	Last day for submission of late-completion work for summer session 2013 courses (application deadline September 1).
	Monday, September 16	Last day to apply for supplemental examinations for courses taken during the summer session 2013.
	Monday, September 16	Deadline for withdrawal with tuition refund from two-term and fall-term courses.
	Monday, September 16	Last day to add two-term and fall-term courses.
OCTOBER	Tuesday, October 1	Last day to apply for re-evaluation of courses taken during the summer session 2013.
	Saturday, October 5	Replacement and supplemental examinations for summer session 2013 courses.
	Monday, October 14	Thanksgiving Day — University closed (see December 3, 2013).
	Sunday, October 27	Last day for academic withdrawal from fall-term courses.
NOVEMBER	T.B.A.	Fall convocations.
	Friday, November 1	Last day for application to undergraduate programs — Winter term 2014.
	Monday, November 25	Last day for instructor-scheduled tests or examinations.
DECEMBER	Sunday, December 1	Last day to apply for Quebec resident status for fall term 2013.
	Monday, December 2	Last day of classes — Fall term.
	Tuesday, December 3	Make-up day for classes scheduled on Monday, October 14 — Instructors must contact Scheduling Office to book a classroom.
	Wednesday, December 4	Examinations begin.
	Thursday, December 19	Examinations end.

2014		
JANUARY	Monday, January 6	Classes begin — Day and evening winter term.
	Wednesday, January 15	Last day to apply for spring 2014 graduation.
	Wednesday, January 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in December 2013.
	Sunday, January 19	Deadline for withdrawal with tuition refund from winter-term courses.
	Sunday, January 19	Last day to add winter-term courses.
FEBRUARY	Saturday, February 1	Last day to apply for supplemental examinations for courses ending in December 2013 (graduating students only).
	Saturday, February 1	Last day to apply for re-evaluation of courses ending in December 2013.
	Saturday, February 1	Last day to apply for late completion of courses ending in December 2013.
	Saturday, February 15	Last day for submission of late-completion work for courses ending in December 2013 (application deadline February 1).
	Monday, February 17	Mid-term break begins.
	Monday, February 17	Replacement examinations begin.
	Monday, February 17	Supplemental examinations begin for courses ending in December 2013 (graduating students only).
	Thursday, February 20	Replacement and supplemental examinations end.
	Friday, February 21	President's Holiday — University closed.
	Sunday, February 23	Mid-term break ends.
MARCH	Saturday, March 1	Last day for application to undergraduate programs — Full-time regular session 2014-15.
	Sunday, March 9	Last day for academic withdrawal from two-term and winter-term courses.
APRIL	Tuesday, April 1	Last day to apply for Quebec resident status for winter term 2014.
	Saturday, April 5	Last day for instructor-scheduled tests or examinations.
	Saturday, April 12	Last day of classes — Regular session 2013-14.
	Wednesday, April 16	Examinations begin.
	Friday, April 18	University closed.
	Saturday, April 19	University closed.
	Sunday, April 20	University closed.
	Monday, April 21	University closed.
MAY	Tuesday, May 6	Examinations end.
	Thursday, May 15	Last day to apply for late completion of courses ending in April 2014.
	Thursday, May 15	Last day to apply for DEF (Deferred) or MED (Medical) notation for courses ending in April 2014.

	Monday, May 19	Victoria Day — University closed.
	Friday, May 30	Last day for submission of late-completion work for courses ending in April 2014 (application deadline May 15).
JUNE	T.B.A.	Spring convocations.
	Sunday, June 15	Last day to apply for supplemental examinations for courses taken during the regular session 2013-14.
	Sunday, June 15	Last day to apply for re-evaluation of courses ending in April 2014.

Administration

Section 12

12

ADMINISTRATION

The following information was updated as of October 1, 2012.

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concordia.ca/vpirsg/board-and-senate/governors/list

Senate

concordia.ca/vpirsg/board-and-senate/senate/list

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artsandscience.concordia.ca/officeofthedeans/facultycouncil/currentmembers

Council of the John Molson School of Business

johnmolson.concordia.ca/en/about/faculty-council/membership

Council of the Faculty of Engineering and Computer Science

encs.concordia.ca/administration-and-governance/faculty-council

Council of the Faculty of Fine Arts

finearts.concordia.ca/officeofthedeans/facultycouncil/mandateandmembership

Council of the School of Extended Learning

concordia.ca/extended-learning/about

Concordia Council on Student Life

deanofstudents.concordia.ca/ccsl/membership

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Suzanne Bélanger, BA, MBA, MA, CFRE

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PRINCIPAL DIRECTOR OF DEVELOPMENT, JOHN MOLSON SCHOOL OF BUSINESS:

Joseph Capano, BComm

DIRECTOR, PLANNED GIVING:

Silvia Ugolini, BCL, LLB

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Section 13

13

ADMISSION REGULATIONS

Associate Vice-President, Student and Enrolment Services
BRADLEY TUCKER

Interim University Registrar
STEPHANIE SARIK

Associate Registrar
ILZE KRAULIS

Director, Student Recruitment
MATT STIEGEMEYER

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SOPHIE FONTAINE

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Manager, Application and Documentation Processing
DAVID DEDEYNE

Admissions Advisors
MELANIE HUME
MAUREEN SCULLY

Admissions Information Officers
ANNE-MARIE FERRARI
T.B.A.

Admissions Advisor – Independent Students
ANGELO FIORENTINO

Location

Sir George Williams Campus
J.W. McConnell Building, Room: LB 700
514-848-2424, ext. 2668
Fax: 514-848-2621
Web: registrar.concordia.ca
University Website: www.concordia.ca

13.1 ADMISSION TO CONCORDIA UNIVERSITY

The University gives fair consideration to all applicants and informs them of its decisions and the basis for such decisions within a reasonable period of time. Concordia has a long tradition of service to adult and part-time students. Basic information on admission requirements and procedures is included in this Calendar. More detailed information can be found in the Undergraduate Program Guide and at the Concordia website.

In keeping with general principles accepted by Quebec universities, admission to Concordia University is open to qualified applicants in the program of their choice. In programs with limited enrolments, not all qualified applicants can be accepted. In such cases, the University accepts those with the strongest qualifications and demonstrable potential. Qualified applicants not admitted to their preferred program are automatically considered for their second-choice program.

Applicants should submit an application through the Concordia website: www.concordia.ca.

There is a single processing centre to which all admission-related documents should be mailed:

Concordia University
Admissions Application Centre
P.O. Box 2900
Montreal, Quebec
H3G 2S2

13.2 DEFINITIONS

The Academic Year

The academic year begins with a summer session (May to August) followed by a regular session (September to April). The summer session includes all courses offered between the beginning of May and the end of August. The regular session is divided into a fall term (September to December) and a winter term (January to April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

Exemption

A student may be exempted from a Concordia course based on previous study or a challenge exam. An exemption from a course has no credit value towards a degree or certificate. Exemptions from required courses may be granted in cases where students have already covered the work at any institution with an appropriate level of performance. Any such courses may be replaced with courses chosen in consultation with their advisors. Students who complete a course for which an exemption has been granted will not be permitted to retain the credits unless they have been granted prior approval from the Faculty, School of Extended Learning, and/or departmental advisor.

Sequence of Courses

- **Prerequisite**

Course A is a prerequisite of Course B when "A" must be taken and successfully completed before taking "B." Students may be deregistered from a course until its prerequisite course(s) has been successfully completed.

- **Co-requisite**

Course A is a co-requisite of Course B when "A" must be taken in the same academic term as "B," unless it has already been successfully completed. Students may be deregistered from Course B if they are not concurrently registered in the co-requisite Course A.

Residence Requirement

This refers to the minimum number of credits which must be taken at Concordia University to obtain a degree or certificate awarded by the University.

Transfer Credits

Transfer credits are credits for courses taken at another institution (or in another Concordia program) which may be transferred towards a Concordia degree or certificate. Concordia courses transferred from an incomplete degree or certificate program or from independent studies will have the credits transferred as well as the corresponding grade provided a grade of C- or better has been achieved. Concordia courses transferred from a completed degree or certificate will have the credits transferred but will not include the corresponding grades. Courses from another institution with a grade of C- or better (or equivalent) may have the credits transferred, if deemed appropriate, but will not include the corresponding grades. Students who repeat a course for which transfer credits have already been awarded will not be permitted to retain the credits unless they have been granted prior approval from the Faculty, School of Extended Learning, and/or departmental advisor.

Student Type

- **Extended Credit Program Students**

Students registered in an extended program, normally requiring 30 credits in addition to the regular requirements, designed for students entering from secondary institutions outside Quebec. (See relevant Faculty section.)

- **Independent Students**

Students not seeking a degree or certificate.

- **Mature Students**

Undergraduate students who do not meet regular academic admission requirements and have been admitted on the basis of their age, experience, and potential.

- **Undergraduate Students**

Students registered in an undergraduate degree or certificate program, whether on a full-time or part-time basis. See §16.1.2 for a definition of full-time and part-time study.

- **Visiting Students**

Undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or students currently registered in certain certificate programs sponsored by external associations (e.g. programs related to the John Molson School of Business).

13.3 ADMISSION REQUIREMENTS

13.3.1 Applicants from Quebec Institutions

Quebec applicants must have successfully completed a two-year pre-university program in a Cegep and qualify for a Diploma of Collegial Studies (DEC) or the equivalent. Applicants who have completed a three-year professional program in a Cegep or have obtained a French or International Baccalaureate are also eligible for consideration.

Cegep records of applicants must include the successfully completed prerequisites of the Concordia degree program for which they are applying. These programs and admission requirements "profiles" are listed in:

- The programs and admission requirements listed under each Faculty section and the School of Extended Learning,
- The Undergraduate Program Guide,
- The Concordia website.

Students admitted to a particular program at the University and who subsequently wish to change to another program may have to complete specific prerequisites in addition to their regular program requirements.

13.3.2 Applicants from Other Canadian Provinces

When applying to a Faculty program, graduates of secondary schools in Canadian provinces and territories other than Quebec are considered for admission to the Extended Credit Program (ECP) at Concordia. The ECP requires completion of 30 credits in addition to the regular requirements. The duration of a degree program is normally four years. The BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education) will generally require five years of full-time study to complete.

To be considered for admission, students must have successfully completed prerequisites of the Concordia degree program for which they are applying. The specific admission requirements are listed in the Undergraduate Program Guide and on the Concordia website.

Students admitted to a particular program at the University and who subsequently wish to change to another program may have to complete specific prerequisites in addition to their regular program requirements.

13.3.3 Transfers from Other Universities

Each transfer application is considered on its merits. The number of transfer credits granted depends on the character, quality, and quantity of the work completed at the accredited institution. In allowing transfer credits, some special conditions apply:

1. Students will not be given credit for courses taken in another university during the same academic term in which they have registered for courses at Concordia University, unless special permission has been obtained in advance from this University.
2. To earn an undergraduate degree, students must take a minimum of 45 credits at Concordia University. These should be the **last** 45 credits. The BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education) require 60 credits at Concordia.
3. Students transferring to Concordia after having failed to achieve a satisfactory record at any university must take a minimum of 60 additional credits at Concordia.
4. At least 50 per cent of the degree credits for honours, specializations, majors, options, or minors must be taken at Concordia. Individual Faculties determine the precise proportion.
5. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. (Before registering, such students should consider whether their purpose might be better served by taking a graduate degree, diploma, or certificate program.) To obtain a second undergraduate degree, students must:
 - a) register in a program with a higher concentration than a minor, and
 - b) complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
 - c) complete at least 36 credits in the new field of concentration.

Further detailed information is available in §16.1.3 and §16.1.7 of this Calendar.

13.3.4 Transfers from Other Post-Secondary Institutions

Each transfer application is considered on its merits. Credits from junior colleges, community colleges, or colleges of applied arts and technology outside Quebec will, in general, be given the same recognition towards undergraduate programs as they receive in their respective provinces.

13.3.5 Transfer Credits and Exemptions

Transfer credits are credits for courses taken at another institution (or in another Concordia program) which may be transferred towards a Concordia degree or certificate. The respective Faculty assesses all requests for transfer credits. Concordia courses transferred from an incomplete degree or certificate program or from independent studies will have the credits transferred as well as the corresponding grade provided a grade of C- or better has been achieved. Concordia courses transferred from a completed degree or certificate will have the credits transferred but will not include the corresponding grades. Courses from another institution with a grade of C- or better (or equivalent) may have the credits transferred, if deemed appropriate, but will not include the corresponding grades.

An exemption from a course has no credit value towards a degree or certificate. Exemptions from required courses may be granted in cases where students have already covered the work at any institution, with an appropriate level of performance. Any such courses may be replaced with courses chosen in consultation with their advisors. Students cannot retain credits for a repeated course or a course in which any exemption has been granted, unless they have been granted prior approval from the Faculty and/or departmental advisor.

13.3.6 Applicants from Outside Canada

In general, candidates who have completed the level of education required for admission to university in their home country and have achieved good grades are eligible to apply for admission. Further information regarding international admission requirements is available in §19.

13.3.7 Former Concordia Students

Former Concordia students who have been absent from Concordia may be required to submit a new application for admission. Students are advised to contact the Office of the Registrar for information on the correct procedure. Students may have to resubmit proof of legal status in Canada and Quebec resident status after an absence of more than 12 months (see §13.7 for required documents). Normally,

- Students who, during their absence from Concordia, attended another institution and attempted **at least** 12 credits, must submit a new application and make arrangements to have an official transcript sent to the Admissions Application Centre. Transfer credits will be assessed as part of the admissions process. If **fewer than** 12 credits have been attempted or if attendance at another institution was based exclusively on a letter of prior approval from the Faculty Student Request Committee, a new application would normally not be required. Students may, however, be eligible for transfer credits for the work completed during their absence.
- Students who **officially** withdrew from Concordia University and who wish to return to study must submit a new application. If they have attended another institution during their absence, they must also make arrangements to have an official transcript sent to the Office of the Registrar. Transfer credits will be assessed as part of the admissions process.
- Students in the Faculty of Arts and Science who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.
- Students in the John Molson School of Business who have been absent from their program for six consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.
- Students in the Faculty of Engineering and Computer Science who have been absent from their program for six consecutive terms or more will be withdrawn from their program and must submit a new application for admission through the Concordia website.
- Students in the Faculty of Fine Arts who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.
- Students in the School of Extended Learning who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an advisor in the Student Transition Centre before reinstatement into the program.

The respective Faculty assesses all requests for transfer credits. Further detailed information is available in §13.3.3, §16.1.3 and §16.1.7 of this Calendar.

13.4 LANGUAGE PROFICIENCY

While the language of instruction at Concordia is English, most assignments and examinations may be submitted in French. Students whose first language is not English must demonstrate language proficiency prior to their admission to Concordia. They will ordinarily be exempt from pre-admission English tests if they have completed any of the following criteria:

- The last four years of high school studies in Quebec and the DES (Secondary V);
- Both Secondary V and the Diploma of Collegial Studies (DEC) in Quebec;
- The Diploma of Collegial Studies (DEC) at an English Cegep in Quebec;
- A minimum of three full years of study in an institution where the sole language of instruction is English;
- Four full years of study in Canada in French at the secondary-school level immediately prior to graduating;
- The course English A1 (Higher or Standard level) in the International Baccalaureate;
- The American or British Option internationale du baccalauréat (OIB) of the French Baccalauréat;
- IGCSE English Language, English as a Second Language or First Language English with a grade of "C" or better;
- The Advanced 2 level of the Intensive English as a Second Language (ESL) program at Concordia University English Language Institute with a final grade of 70%.

If none of these criteria fits, a student whose first language is other than English must write a pre-admission English test. Proof of proficiency in English must be provided by achieving the appropriate score on one of the following:

- Test of English as a Foreign Language (TOEFL);
- University of Michigan English Language Assessment Battery (MELAB);
- International English Language Testing System (IELTS);
- Canadian Academic English Language Assessment (CAEL);
- Cambridge Certificate of Proficiency in English (CPE) and Certificate in Advanced English (CAE).

For information on the minimum scores required please consult the Undergraduate Program Guide or the Concordia website. Test results must be reported directly to the Admissions Application Centre by the test centre. Results more than two years old will not be accepted as proof of language proficiency. **In all cases, the University reserves the right to require a proficiency test if it is deemed necessary.**

13.5 APPLYING FOR ADMISSION

Students should submit an application through the Concordia website at www.concordia.ca. Students are encouraged to apply for admission as early as possible to allow sufficient time for the evaluation of their application. This is especially true for applicants from outside Canada. Supporting documents must be submitted at the time of application or as soon afterwards as they become available.

Applicants must state their full academic history on their application for admission or risk cancellation of their admission or registration. No transfer credit will be awarded retroactively for former studies not reported in the application.

13.5.1 Application Fee

There is a \$100 (Canadian) application fee required with every application, payable to Concordia University by certified cheque, money order, MasterCard, Visa, American Express or debit card (Interac). Applicants from outside Canada may pay this fee by international money order or draft drawn on a Canadian bank in Canadian funds.

This application fee is not refundable under any circumstances, nor can it be used towards tuition. It is not transferable to a session other than that for which the student is applying.

13.5.2 Deadlines

September is the normal point of entry to full-time and part-time studies. Entry in January is limited to certain programs. Students should refer to the admissions information within the relevant Faculty section, in the Undergraduate Program Guide, or on the Concordia website.

March 1 and November 1 are the application deadline dates normally set for the fall and winter terms respectively. However, candidates are encouraged to submit their applications well before the start of term to allow sufficient time for evaluation and notification. Candidates applying from outside of Canada should submit their applications by February 1 for September entry and September 1 for January entry.

13.5.3 International Applicants

While the normal entry period for International students from outside Canada is September, Faculties may also consider them for January admission. The Faculty of Arts and Science, the John Molson School of Business, and the Faculty of Engineering and Computer Science have implemented a rolling international admissions process whereby a student whose application becomes complete too late to be considered for a given session will automatically be considered for the next entry date. Please note that there is no rolling admission for Fine Arts.

13.6 SPECIAL ADMISSIONS

13.6.1 Mature Students

Mature students are undergraduates who have not met the regular academic admission requirements (e.g. completion of a DEC or equivalent), but have been admitted on the basis of age, experience, and potential. Mature students may study full-time or part-time.

Information on Mature Entry is contained in §14.

13.6.2 Visiting Students

Visiting students are undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or they are students currently registered in certain certificate programs sponsored by external associations. These students may apply for Visiting student status by contacting the Birks Student Service Centre. The granting of such status in no way guarantees a student a place in a course.

1. Students from other Quebec universities who wish to take courses at Concordia must complete a web-based Inter-University Exchange Authorization form at crepuq.qc.ca. Additional information is available in §16.1.7.
2. Undergraduate students from other universities outside the province of Quebec who wish to take courses at Concordia must submit a letter of permission from the registrar of their home university and Canadian citizenship/permanent residency documents or *Quebec Acceptance Certificate* (CAQ) and *Study Permit*. Visiting students who are Canadians or permanent residents may be eligible to pay Quebec rates of tuition upon submission of proof of Quebec residency in accordance with government criteria (see §13.7).
3. Students who wish to register in certificate programs sponsored by external associations must submit proof of membership in the association and citizenship documents. Visiting students who are Canadians or permanent residents may be eligible to pay Quebec rates of tuition upon submission of proof of Quebec residency in accordance with government criteria (see §13.7).

13.6.3 Independent Students

Concordia University allows individuals to register as Independent students — students who can take individual courses but are not registered in a degree program — if they satisfy the admission requirements.

Canadian citizens and permanent residents can qualify for admission by providing proof of being over 21 years of age as of May 15 for the summer session, September 15 for the fall term or January 15 for the winter term OR providing proof of meeting the minimum academic requirements for entry to the University. International students must be academically eligible for University entrance.

Independent students may register for a maximum of 18 credits a year, equally divided between fall and winter terms; their Independent status in no way guarantees them a place in a given course. International Independent students are required to register for a minimum of 12 credits each fall and winter term according to Immigration Quebec rules.

Independent students are admitted through Enrolment Services and will subsequently receive academic advising through the Student Transition Centre. Students who wish to enter a degree or certificate must submit a formal application. Credits acquired as an Independent student may be applied towards the degree or certificate if applicable. In the case of the Faculty of Arts and Science, a maximum of 30 credits earned in the Independent status may be transferred towards a degree.

13.6.4 Complementary University Credit Certificate Students (School of Extended Learning)

Complementary University Credit certificate students are students who satisfy the minimum entry requirements to the University and who have been admitted by either satisfying the previously stipulated undergraduate program admission requirements or have been admitted on the basis of age, experience, and potential. Complementary University Credit certificate students may study full-time or part-time. Information on Complementary University Credit certificates is contained in §21.

13.6.5 Senior Students

Concordia University is committed to lifelong learning and community service. Seniors at Concordia either take credit courses in a program or as Independent students. They can also choose to audit courses on a non-credit basis through the Senior Audit program administered by the Student Transition Centre.

Students aged 55 and over who wish to attend undergraduate courses primarily in the Faculty of Arts and Science for personal interest rather than for credit, may register to audit courses. Though not required to write class assignments or final examinations, they participate in every other aspect of the courses. Senior Audit students pay significantly reduced fees. For more information, call 514-848-2424, ext. 3893.

If seniors wish to pursue an undergraduate program or take courses as Independent students for credit, they may do so at the regular tuition fees. Some assistance through the William Schiff Scholarship is possible for those 55 or over. Applications and information may be obtained at the Financial Aid and Awards Office.

13.7 REQUIRED DOCUMENTS

Proof of Canadian Citizenship or Permanent Residency

All applicants must provide documentary proof of their status in Canada. Applicants who have been accepted by the University and who have not provided this proof of status will automatically be charged the higher International tuition fees. To provide proof of Canadian citizen/permanent resident status, applicants must submit a photocopy to the Admissions Application Centre of one of the following documents:

- Canadian Birth Certificate;
- Quebec Birth Certificate issued by the Quebec Directeur de l'état civil with the mention "Certified" or "certifié conforme";
- Canadian Citizenship Card (both sides);
- Canadian Citizenship Certificate;
- Permanent Resident Card (both sides) or IMM 5292 or IMM 5688;
- Certificate of Indian Status Card (both sides).

The following documents are **not** acceptable:

- Driver's Licence;
- Medicare Card;
- Social Insurance Number Card;
- Quebec Baptismal Certificate.

In case of a discrepancy in information provided, the University reserves the right to ask students to provide additional documentation to verify their legal name.

Proof of Quebec Residency (Applicable to Canadian Citizens and Permanent Residents)

The University will endeavour to establish Quebec residency status for applicants from Quebec Cegeps by importing Quebec resident status data electronically from government files based on their "permanent code."

Other Canadian citizens and permanent residents must present proof of Quebec residency. Students who have not provided such evidence are automatically charged non-Quebec resident fees.

To prove Quebec residency, applicants must supply the Office of the Registrar with an original or a legible photocopy of one of the following documents:

- A “certified” birth certificate issued after January 1, 1994 by the Government of Quebec (regardless of place of birth), which does not contain the notation “*Émis en vertu de l’article 137 du Code Civil*”;
- A current Canadian passport clearly indicating a place of birth in Quebec;
- A *Certificat de sélection du Québec* (CSQ) or an official letter from the Ministère des Communautés culturelles et de l’immigration du Québec attesting that the student is the holder of a CSQ;
- A loan certificate issued by l’Aide financière aux études du ministère de l’Enseignement supérieur, de la Recherche, de la Science et de la Technologie for the current year.

In addition, the student may fit into one of a number of other approved government categories. Among the categories recognized by the Government are:

- A student adopted by a person with residency status in Quebec at the time of the adoption;
- A student, one of whose parents resides in Quebec;
- A student who has resided in Quebec for at least 12 months before becoming a full-time student;
- A student who came to Canada as a permanent resident without a *Certificat de sélection du Québec* (CSQ) but has resided in Quebec for at least three months without having lived elsewhere for more than three months since landing in Canada;
- A student whose spouse qualifies under these criteria as a Quebec resident.

Students who had Quebec resident status at Concordia in the past may have to renew their Quebec resident status after an absence of more than one year.

If, upon acceptance to a University program, proof of Quebec residency has not been established, students must apply for Quebec residency on the student portal at myconcordia.ca and submit the required documentation by the deadline for the term in question. Details can be found at quebecresidency.concordia.ca. Quebec resident status may not be granted retroactively.

13.7.1 All Applicants

Academic Documents

Applicants must submit all secondary and post-secondary academic records. In order for their admission to be finalized, they must ensure that an **official** transcript is forwarded directly to the Admissions Application Centre by all of the institutions which they have attended.

With their application, students currently enrolled at an institution must include results from all previous terms together with a list of courses in progress. They must arrange for an **official** transcript with the results of the final semester to be forwarded as soon as possible once they have been admitted. All documents must be originals or appropriately certified copies. Uncertified copies are not acceptable; neither are records transmitted by fax. Transcripts in a language other than English or French must be accompanied by a certified translation. If the transcript does not detail the subjects and the grades, a certified statement of these from an authorized official of the institution should also be included.

The above procedure whereby institutions send official transcripts directly to Concordia University is the normal method for receipt of official transcripts. However, in order to accelerate the review of their file, students may submit official transcripts in **sealed envelopes** along with their application, subject to the following procedures: applicants are to request each previous educational institution to provide them with a copy of their official transcript, sealed in an envelope which bears the name and address of the school, the institutional logo (if applicable), a notice on the envelope stating that it contains official transcripts, and a signature/signature stamp/explanatory label placed across the seal of the envelope. **The sealed-envelope transcript method may be used only for transcripts issued by institutions in North America.**

NOTE: All required documents received by Concordia University become the property of the University. Official documents and/or transcripts will not be returned to the applicant and will be destroyed after three years.

13.7.2 Permanent Code

The Ministère de l’Enseignement supérieur, de la Recherche, de la Science et de la Technologie requires all registered students to have a “permanent code” (a unique identifying number) which is assigned by the Ministry. Students who already have a permanent code must enter it on their application form.

For students who have attended or are currently attending Cegep in Quebec, Concordia University will automatically obtain the required Cegep record electronically from CREPUQ (Conférence des recteurs et des principaux des universités du Québec) by using their permanent code.

13.8 SELECTION PROCESS AND NOTIFICATION

13.8.1 Conditional Admission

Applicants seeking admission to undergraduate programs may be granted conditional admission on the basis of available academic records, including interim results for the current year. Final admission is contingent upon a student’s successfully completing all the academic admission requirements and meeting all conditions as stated in the conditional offer of admission issued by the University.

13.8.2 Confirmation Fee

Applicants who have been granted admission or conditional admission to full-time studies or to certain part-time programs are required to submit a \$100 (Canadian) confirmation deposit to confirm their intention to attend the University. This non-refundable confirmation deposit is applied towards tuition fees.

Applicants who receive a conditional offer of admission, but who are ultimately denied admission because they have not completed the minimum academic requirements for entrance, will receive a refund of their confirmation deposit upon request.

13.8.3 Registration

Complete information regarding registration is available at myconcordia.ca.

Mature Entry

14.1 ADMISSION AS A MATURE STUDENT

14.2 PROGRAM REQUIREMENTS

- 14.2.1 Faculty of Arts and Science
- 14.2.2 John Molson School of Business
- 14.2.3 Faculty of Engineering and Computer Science
- 14.2.4 Faculty of Fine Arts
- 14.2.5 School of Extended Learning

14.3 ASSISTANCE

Section 14

14

MATURE ENTRY

Concordia University has a long history of making education accessible to men and women of all ages and academic backgrounds. Through Mature Entry, those lacking the regular pre-university requirements can still earn university degrees and certificates.

14.1 ADMISSION AS A MATURE STUDENT

At Concordia, the term “Mature Entrants” is used to designate students aged 21 and over who have not completed the normal academic admission requirements. The designation does not apply to adult applicants whose academic background qualifies them for regular admission.

Students apply for admission to particular programs within one of the four Faculties of the University. In every respect, with the exception of the 18-credit requirement, Mature Entrants at Concordia are treated as regular undergraduates and are expected to meet the same standards before graduating.

The admission of applicants for Mature Entry is subject to the following conditions:

1. Applicants must have reached the age of 21 by August 1 for the September term, December 1 for the January term, or April 1 for the May term in any given year;
 2. Although not meeting the normal academic requirements for admission (Québec Diplôme d'études collégiales or the equivalent), applicants must satisfy the University that they have the potential to undertake undergraduate courses; those who have the Québec Diplôme d'études collégiales or the equivalent should contact the Office of the Registrar and their respective Faculty regarding their admission;
 3. Applicants must have been out of school — that is not engaged in full-time study — for at least 24 months since attaining the age of 18. Applicants who have been out of school for only 12 months are also admissible provided that they have had no unfavourable academic record in the previous 24 months;
 4. Applicants must be Canadian citizens or permanent residents (landed immigrants). Applicants must submit proof of citizenship and age, together with school records and any material which may indicate ability to pursue university studies. Applicants are expected to arrange for official transcripts of all their previous studies to be sent directly to Concordia; (§13 provides general information on how to apply for admission.)
 5. In all programs, some students may require courses in English as a Second Language, as determined by language proficiency testing. See §13.4 of this Calendar regarding language proficiency testing.
-

14.2 PROGRAM REQUIREMENTS

Normally, Mature Entrants without any Diplôme d'études collégiales (DEC) or equivalent must complete at least 18 additional credits of preparatory or complementary courses. These additional credits are intended to help them to prepare for their subsequent studies. Students with a partial DEC or equivalent may be awarded transfer credits for some of the additional 18 credits.

When selecting courses to fulfill the additional credit requirements, Mature students are required to consult with advisors at the Student Transition Centre. When selecting program courses, all students are required to consult with their program advisor. Students in the Faculty of Engineering and Computer Science are required to consult only with their Faculty program advisors.

14.2.1 Faculty of Arts and Science

For most BA programs, there are no specific program prerequisites. Therefore, within the initial 18 credits, students are encouraged to take courses which will broaden their educational background or help them develop study skills.

Consultation with the Student Transition Centre is encouraged in the choice of the 18 additional credits required for the degree or certificate.

Arts

The programs listed below have specific prerequisites which will take up some or all of the initial 18 credits.

Community Service (Certificate) AHSC 230³, 232³, 270³; ENGL 212³; 6 credits in the social sciences chosen in consultation with the program advisor.

Economics (BA) MATH 209³

NOTE: Students may need one or more of MATH 200³ and MATH 206³.

Early Childhood and Elementary Education or BEd (TESL)

NOTE: Mature students wishing to apply to Early Childhood and Elementary Education or the BEd (TESL) must complete 18 credits prior to applying for entry.

Family Life Education (Certificate) AHSC 220³, 230³, 232³; ENGL 212³; 6 credits in the social sciences chosen in consultation with the program advisor.

Therapeutic Recreation, Specialization (BA)

BIOL 200³ or 201³ or 202³

Mathematics (BA)

MATH 203³, 204³, 205³

NOTE: Students may need one or more of MATH 200³ and MATH 201³.

NOTE: Students not having MATH 202³ or the equivalent must include it in their 18 credits.

Psychology (BA)

PSYC 200⁶; BIOL 201³ or 202³; 3 credits in Mathematics (in preparation for statistics) chosen in consultation with the Student Transition Centre.

Science

For those Mature Entry students pursuing a degree in Science, the following courses must be included within their 108-credit requirement:

- 6 credits in Chemistry: CHEM 205³, 206³
- 9 credits in Mathematics: MATH 202³, 203³, 205^{3*}
- 8 credits in Physics: PHYS 204³, 205³, 224¹, 225¹

Additional requirements for programs in the following departments:

- Biology and Psychology: BIOL 201³, PHYS 206³, 226¹
- Chemistry: PHYS 206³, 226¹ and BIOL 201³
- Biochemistry: PHYS 206³, 226¹ and BIOL 201³
- Environmental Geography: PHYS 206³, 226¹ and BIOL 201³
- Environmental Science: PHYS 206³, 226¹, MATH 204³ and BIOL 201³
- Exercise Science: PHYS 206³, 226¹ and BIOL 201³
- Mathematics: MATH 204³, PHYS 206³, 226¹
- Physics: PHYS 206³, 226¹ and MATH 204³

NOTE: Students must consult with advisors of the Student Transition Centre to determine the appropriate sequence of the above credits in the BSc degree.

**Students not having MATH 201³, or the equivalent, must take it in place of one of their elective courses. Some students may also need MATH 200³.*

14.2.2 John Molson School of Business

Mature Entry — the 108-credit program

In addition to the 90-credit program, Mature Entry students will be required to complete the following 18 credits outside the offerings of the John Molson School of Business. Those credits are:

- 6 credits in MATH 208³, 209³
- 6 credits in ECON 201³, 203³
- 3 credits in DESC 200³
- 3 additional elective* credits.

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

NOTE: Students may need one or more of MATH 200³ and MATH 206³.

Requirements for certificate programs are listed with the program descriptions in §61 of this Calendar.

14.2.3 Faculty of Engineering and Computer Science

Engineering

Mature Entrants to the BEng degree, which requires the completion of a minimum of 120 credits, are also required to complete all outstanding required prerequisites in addition to their program. Prerequisite courses are as follows:

- CHEM 205³
- MATH 202³, 203³, 204³, 205³
- PHYS 204³, 205³

Six credits chosen from courses in the humanities and social sciences. ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement. Students should refer to §71.20.2 when selecting these courses.

NOTE: In all programs, students may need one or more of MATH 200³ and MATH 201³.

NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

Computer Science

Mature Entry students accepted to the BCompSc must include in their degree program (minimum 108 credits) the following courses, depending upon their chosen option:

- a) Computer Systems Option:
 - MATH 202³, 203³, 204³, 205³
 - PHYS 204³, 205³
 - CHEM 205³
 - and six credits chosen from courses in the Humanities or Social Sciences in Section 71.20.2

- b) Computation Arts Option:
MATH 202³, 203³, 204³, 205³
and six credits chosen in consultation with an academic advisor from the Department of Design and Computation Arts
- c) All other options (Computer Applications, Computer Games, Information Systems, Mathematics and Statistics, Software Systems, and Web Services and Applications Options):
MATH 202³, 203³, 204³, 205³
and six credits chosen from courses in the Humanities or Social Sciences in Section 71.20.2

Depending on the number of free electives in their option, Mature Entry Computer Science students may use up to a maximum of 24 credits of prerequisites (including the above courses) within the 108-credit program.

A maximum of six credits of prerequisites may be used within the regular 90-credit program.

NOTE: In all programs, students may need one or more of MATH 200³ and MATH 201³.

NOTE: Some students may require courses in English as a Second Language, as determined by language proficiency testing.

14.2.4 Faculty of Fine Arts

Mature Entry students wishing to pursue degree and certificate programs in the Faculty of Fine Arts must take 18 additional credits appropriate for entry into their ultimate area of concentration. These credits will be chosen with the approval of the Faculty and Student Transition Centre advisors.

14.2.5 School of Extended Learning

Mature Entry students wishing to pursue a Complementary University Credit (CUC) certificate offered by the School of Extended Learning may be required to complete additional courses (English proficiency, mathematics, computer literacy) in order to satisfy admission requirements. Students will be evaluated on these skills during the admission process and will be advised of any additional course requirements in their letter of admission. These courses will be chosen with the approval of the Student Transition Centre advisors.

Applicants seeking entry to a CUC certificate will be expected to demonstrate that they have some experience that is relevant to the field they are studying.

14.3 ASSISTANCE

Mature students accepted into the University must inform themselves of the specific requirements of their program and should meet with their program advisors in the Faculties. They may also benefit from the additional support available at the Student Transition Centre. (For more information on the Student Transition Centre, see §21.)

Tuition and Fees

Section 15

15

TUITION AND FEES

The University reserves the right to modify the published scale of tuition and other student fees without prior notice, at any time before the beginning of an academic term. The Tuition and Fees information and the authoritative document on tuition and other fees, and the University's financial regulations, is available on the Concordia University website at concordia.ca/admissions/tuition-and-fees.

Academic Information: Definitions and Regulations

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Section 16

Associate Vice-President, Student and Enrolment Services
BRADLEY TUCKER

Interim University Registrar
STEPHANIE SARIK

Associate Registrar
ILZE KRAULIS

Director, Student Recruitment
MATT STIEGEMEYER

Director, Admissions and Services to Students
SOPHIE FONTAINE

Manager, Government Reporting and Statistics
MARIE-CLAIRE NEWMAN

Manager – Birks Student Service Centre
LORRAINE TOSCANO

Manager – Course Registration, Examinations and Academic Scheduling
LINDA HULL

Manager – Administration
TANYA POLETTI

16.1 GENERAL INFORMATION

The Calendar is an official University document defining academic programs and the regulations which pertain to them. It is accurate as of its publication date. The University Senate reserves the right to modify the academic programs and regulations at its discretion after the publication date of the Calendar. In addition, the University reserves the right to modify the published scale of tuition and other student fees at any time before the beginning of an academic term. The most current information is available from the Office of the Registrar and, for graduate programs, from the School of Graduate Studies. Moreover, the information contained in the Calendar or any other University document related to academic programs and regulations is subject to verification and correction by the Office of the Registrar and the School of Graduate Studies.

The regulations contained in this section apply to all students at the undergraduate level, whether they are enrolled in degree, certificate, or Qualifying programs or registered as Visiting or Independent students, with the following exceptions:

- Degree, certificate, and Qualifying program requirements are determined by those in effect in the year of the student's admission. (See §16.2)
- The regulations concerning residence requirements and academic performance requirements are also governed by those in effect in the year of a student's admission.
- Determination of high academic achievement is governed by the most recent regulation in effect.

Students who were admitted before the current year should consult the appropriate Calendar and the Office of the Registrar or, for graduate programs, the School of Graduate Studies, for information on these regulations.

Specific written permission must be obtained from the appropriate authority for exemption from any academic regulation.

Students must have a valid ID card to access certain services.

16.1.1 Academic Year

The academic year begins with a summer session (May to August) followed by a regular session (September to April).

Summer Session:

The summer session includes all courses offered between the beginning of May and the end of August.

Regular Session:

The regular session is divided into a fall term (September – December) and a winter term (January – April), each 15 weeks long. Terms include an examination period, during which any final examination must be held. The Academic Calendar §11 lists precise dates for the beginning and end of classes and examination periods.

16.1.2 Credit System

In accordance with the recommendations of the Conseil des Universités du Québec, students' academic activity is measured according to the credit system. For the average student, each credit represents a minimum of 45 hours of academic activity, including lectures, tutorials, laboratories, studio or practice periods, examinations, and personal work.

I. FULL- AND PART-TIME STATUS

A student's status is determined by the number of credits for which she or he is registered at the close of the tuition refund period, in the following way:

	Full-Time*	Part-Time
Registration for both fall and winter terms	24 credits or more	Less than 24 credits
Registration for fall term only	12 credits or more	Less than 12 credits
Registration for winter term only	12 credits or more	Less than 12 credits
Registration for the summer session	12 credits	Less than 12 credits

*NOTE: Students receiving Quebec loans and bursaries are advised that, according to the rules established by the Government of Quebec, they must maintain registration of 12 credits or more **each term**. For further information, see Financial Aid §18.6.1. For Quebec residency purposes, full-time and part-time are defined on a per-term basis. Courses with DISC notation are included in the calculation. For further information, see Proof of Quebec Residency §13.7.

II. CREDIT LOADS

Regular Session — Full-Time Status

Full-time students normally take 30 credits in each regular session. They may register for a maximum of 15 credits in each of the fall and winter terms. Engineering programs may require more than 30 credits. For information on Engineering credit loads, see §71.

Regular Session — Part-Time Status

Part-time students in all Faculties may register for a maximum of nine credits in each of the fall and winter terms.

Regular Session — Independent Status

Independent students may normally register for a maximum of nine credits in each of the fall and winter terms.

Summer Session

Any student, other than one in the Institute for Co-operative Education (§24) or the Faculty of Engineering and Computer Science (§71), may register for a maximum of 12 credits during the summer session.

16.1.3 Residence Requirements

Residence requirements define the number of credits which students working towards a Concordia University degree must take at the University itself.

1. Of the total number of credits required for an undergraduate degree, students must take a minimum of 45 credits, normally the last 45, at Concordia University. The BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education) require 60 credits, normally the last 60, at Concordia.
2. At least 50 per cent of the credits for honours, specializations, majors, minors or other concentrations must be taken at Concordia. The BComm and BAdmin programs also require that at least 50 per cent of the core courses be taken at Concordia.
3. Concordia University students who wish to include courses taken at another university within their residence requirements must obtain permission **in advance**. (See §16.1.7.)
4. Students who already have an undergraduate degree may undertake a second undergraduate degree, subject to the conditions below. (Before registering, such students should consider whether their purpose might be better served by taking a graduate degree, diploma, or certificate program.) To obtain a second undergraduate degree, students must:
 - a) register in a program with a higher concentration than a minor, and
 - b) complete at least two-thirds of the credits normally required for the second degree in courses other than those credited to the first degree — for example, a minimum of 60 credits must be completed when the normal requirement is 90 credits, and
 - c) complete at least 36 credits in the new field of concentration.

5. An exception to 4b) above, is the BEd in TESL, for which students must complete at least half of the 120 credits required for the second degree in courses other than those credited to the first degree.
6. Any student who is accepted at Concordia University after failing or compiling an unsatisfactory record at another university, will generally be required to complete at least 60 credits.

16.1.4 Registration for Courses

Students select courses for each session (summer and fall/winter) prior to the start of classes.

- All newly admitted students will receive advising and registration information in the offer of admission letter.
- New Independent students can obtain registration information at the School of Extended Learning and in the online Independent Students Information Guide at registrar.concordia.ca/indepen/register.html.
- New Visiting students can obtain registration information in the online Registration Guide at registrar.concordia.ca/webguide.
- Returning students in good standing can obtain registration information at myconcordia.ca.

Most students will be able to register for all their courses online at myconcordia.ca.

16.1.5 Cancellation of Classes

If no class cancellation notice is posted on the classroom door, classes are officially considered cancelled if an instructor is 15 minutes late for a 50-minute class, 20 minutes late for a 75-minute class, or 30 minutes late for longer classes.

16.1.6 Withdrawal

1. The Student's Responsibilities

It is the student's responsibility to meet all deadlines and follow all necessary steps to withdraw from a course or courses, or from the University. Not attending classes or informing an instructor of an intent to withdraw does not constitute official withdrawal. It is not mandatory for an instructor to provide students with any evaluation or feedback of their progress in a course before the withdrawal deadline. Students who do not properly withdraw before the published deadlines, and who do not complete assigned work, tests or exams, will receive failing grades.

2. Withdrawal from a Course or Courses

There are two different types of course withdrawal:

- a) *DNE (Did Not Enter)*
The DNE withdrawal has no academic or financial impact on the student. The DNE'd course will be removed from the student's academic record and no fees will be charged for that course. The DNE deadline is usually within the first two weeks of the term for fall and winter courses and within the first week for spring and summer courses. For exact dates, please refer to point 4. *Withdrawal Deadlines*.
- b) *DISC (Discontinued)*
The DISC withdrawal notation remains on a student's academic record and does not affect the student's GPA. However, the student is financially responsible for the payment of all tuition and other fees pertaining to the course. The DISC deadline is usually after the eighth week of classes of the term for fall and winter courses and within the first five weeks for spring and summer courses. For exact dates, please refer to point 4. *Withdrawal Deadlines*.

Students who wish to withdraw (DNE or DISC) from a course or courses must do so online at myconcordia.ca → MyConcordia Menu → Registration.

When dropping courses online, students must make sure to confirm the transaction and/or verify their registration record to make sure that the course was properly dropped.

3. Withdrawal from the University

Students who wish to withdraw from the University completely must:

- a) withdraw from their courses by the appropriate deadline (see §11 Academic Calendar) online at myconcordia.ca → MyConcordia Menu → Registration

and

- b) notify the Office of the Registrar in writing, by:

- i. registered letter addressed to:
Office of the Registrar
Admissions Office
Room S-LB 700
1455 De Maisonneuve Blvd. W.
Montreal, Quebec H3G 1M8

Students should be sure to legibly print their full name and include their Concordia student ID number and signature.

or

- ii. a signed fax sent to 514-848-2621. Students should be sure to legibly print their full name and include their Concordia student ID number and signature.

Correspondence for course withdrawal must be received by the deadline dates (see §11 Academic Calendar).

4. Withdrawal Deadlines

Withdrawal deadlines are published in the Undergraduate Class Schedule (registrar.concordia.ca/webguide/termdates.html).

All financial regulations pertaining to course withdrawals, and refunds or financial credit for fees, are available online at:

- tuitionandfees.concordia.ca → Tuition Fees & Financial Regulations
- myconcordia.ca → MyConcordia Menu → Financial → Tuition and Fees → C. Tuition Refunds

5. Lapsed Program Status

Students in the Faculty of Arts and Science who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.

Students in the John Molson School of Business who have been absent from their program for six consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.

Students in the Faculty of Engineering and Computer Science who have been absent from their program for six consecutive terms or more will be withdrawn from their program and must submit a new application for admission through the Admissions Application Centre.

Students in the Faculty of Fine Arts who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an academic advisor before reinstatement into the program.

Students in the School of Extended Learning who have been absent from their program for nine consecutive terms or more will be withdrawn from their program and must meet with an advisor in the Student Transition Centre before reinstatement into the program.

16.1.7 Studies at Other Universities

With the exceptions listed below, students who wish to take courses at other universities for transfer credit (for example, in the summer) must obtain permission **in advance** from their Faculty Student Request Committee.

1. Inter-University Registration Within Quebec (Inter-University Agreement)

Quebec universities have agreed to permit students registered at one university (called the home university), to take one or more courses at another university (called the host university) if they have valid reasons for doing so.

A student must obtain authorization to cross-register from his or her academic advisor, the appropriate Associate Dean or delegate of the student's Faculty, and the Registrar. Students must apply via a web-based application at crepuq.qc.ca.

The host university has the right to refuse to register a student from another university in any of its courses or programs. Students are expected to follow the registration procedures of the host university and are subject to the regulations of the host university, **except** for tuition and fee policies which are governed by the home university. Fees are paid to the home university.

Students may only register in those courses for which they receive prior authorization. Concordia will deregister Inter-University students from courses where students do not have the appropriate permission.

Credit earned at host universities counts towards Concordia residence and degree requirements. The grades achieved at other institutions for courses taken under the Inter-University Agreement will be recorded on Concordia records and transcripts using a grade conversion table available at the following website: registrar.concordia.ca.

These grades will be included in the calculation of grade point averages in the same manner as any grade achieved in a course taken at Concordia.

2. Concordia Student Exchange Program and Internships Abroad

To promote international education, Concordia International offers students the opportunity to spend up to one academic year studying abroad on exchange at one of Concordia's partner institutions throughout the world. While participating in an exchange, students remain registered at Concordia University, pay their normal Concordia tuition fees, and are eligible for Concordia awards and financial aid. Students are also responsible for paying all incidental fees, such as but not limited to: health and travel insurance, living expenses, fees for any required international travel documents to study in their host country, and transportation costs to and from the host institution. The application deadlines are **February 1** for summer, fall, winter and academic year placements and **June 15** for final winter placements. Students applying for the winter are strongly encouraged to apply by February 1 as spots at certain partner institutions may be limited after this date. A limited number of exchange spots for summer may be available at select host institutions. Please check with Concordia International before applying for summer.

To be eligible to participate in an academic exchange, undergraduate students must meet the following conditions:

- have successfully completed a minimum of 24 undergraduate Concordia credits toward their degree by the time the exchange program begins;
- be in good academic standing and have a good academic record;
- have their Faculty's permission to transfer a preliminary selection of courses from their host institution to their Concordia degree requirements.

In addition to academic exchange programs, Concordia International also offers students opportunities to participate in several internship programs abroad. Please visit Concordia International's website for current opportunities: international.concordia.ca.

MESRST Bursary for Study Outside Quebec / Programme de bourses pour de courts séjours d'études universitaires à l'extérieure du Québec

This bursary is a provincially funded program for Quebec resident students registered in a program leading to a bachelor's, master's, or PhD degree who would like to complete part of their degree program outside the province. The amount of the bursary varies according to the region and duration of study as follows:

- \$1,000 maximum per month for studies undertaken in Australia, Japan, New Zealand, the United States and Western Europe;
- \$750 maximum per month for all other countries and other provinces in Canada.

Eligibility: Undergraduate students must have completed at least 24 Concordia credits toward their degree by the time their program

begins; be enrolled full-time while receiving the bursary; be in good academic standing; be a Quebec resident according to the MESRST; and their program abroad must last for at least two months. Funding will be provided for a maximum of eight months. For application information and instructions, students should contact Concordia International at 2080 Mackay/Annex X (SGW Campus); 514-848-2424, ext. 4986; studyaway@concordia.ca.

16.1.8 Student Request Committees

1. Student Request Committees consider applications from students for exceptions to academic regulations or related matters, such as permission for course overloads, registration or withdrawals after the deadline, course substitutions, exceptions to residence requirements, permission to take courses at other universities, and exceptions to the rules governing the refund of tuition and other fees.
2. A student request shall be made on a *Student Request* form available online through the student portal: MyConcordia Menu → Student Administrative Affairs → UG Student Requests. The completed request form, student statement, and all supporting documentation should be submitted as follows:
 - for students registered in the Faculty of Arts and Science programs — to the academic department housing the program in which they are registered;
 - for students registered in the John Molson School of Business, the Faculty of Engineering and Computer Science or Fine Arts programs — to the Faculty Undergraduate Student Affairs Office;
 - for students registered in courses offered by the School of Extended Learning (SEL) — to the SEL's Welcome Centre;
 - for Independent students — to the Birks Student Service Centre.

Requests for refunds of fees will not be considered unless the student has officially withdrawn from the course(s) in question (DISC).
Requests based on medical grounds must be supported by a *Student Request Medical Certificate* duly completed by a registered medical practitioner. The *Medical Certificate* form is available online through the student portal: MyConcordia Menu → Student Administrative Affairs → UG Student Requests.
3. A student request shall be made within a reasonable period of time from the circumstances giving rise to the request. Normally, the following guidelines apply:

<i>A request with respect to a:</i>	<i>must be submitted by:</i>
Summer-term (1) course	November 1
Fall-term (1/2) course	March 1
Fall/winter (3) course	August 1
Winter-term (4) course	August 1

In determining whether the period of time elapsed is reasonable, all of the circumstances of the case shall be evaluated.
4. Each Faculty shall have a Student Request Committee composed of:
 - no fewer than three faculty members appointed by the Faculty Council;
 - one representative appointed by the Registrar;
 - one student appointed by the Faculty Council;
 - the Associate Dean (or delegate) who shall chair the Student Request Committee.

The School of Extended Learning Student Request Committee shall be composed of:

 - no fewer than two faculty members appointed by the Council of the School of Extended Learning;
 - one representative appointed by the Registrar;
 - one student appointed by the School Council;
 - the Director of the Student Transition Centre (or designate) who shall chair the School of Extended Learning Student Request Committee.

The Independent Student Request Committee shall be composed of:

 - one representative appointed by each Faculty Council for a total of four representatives;
 - one representative appointed by the Director of the Student Transition Centre;
 - one student appointed by the Concordia Student Union;
 - one representative appointed by the Registrar who shall chair the Independent Student Request Committee.
5. A Student Request Committee may delegate the responsibility for handling certain kinds of requests to designated individuals (e.g. academic advisors, faculty advisors, School of Extended Learning advisors, student affairs coordinators). Where a decision is made by a delegated individual, the student may appeal that decision to the Student Request Committee, as a whole, based on new evidence or other serious grounds, by sending an appeal request, in writing, to the Chair of the Student Request Committee within ten (10) working days of receiving the decision.
6. In all cases, the delegated individual and/or the Student Request Committee shall render a reasoned written decision, based on the complete and documented written request, within thirty (30) working days of receiving the request. Decisions of the Student Request Committee are final, with the exception of decisions made on requests for withdrawals after the DNE deadline. All Faculty or School of Extended Learning recommendations in favour of a retroactive withdrawal will be forwarded to the University Retroactive Withdrawal Committee for the final decision.
The University Retroactive Withdrawal Committee shall be chaired by the Vice-Provost, Teaching and Learning and composed of:
 - one representative appointed by each Faculty Council and the Council of the School of Extended Learning for a total of five representatives (two-year term, one time renewable [maximum four years]);
 - the University Registrar;
 - the manager of the Student Accounts Office;
 - one student appointed by the Concordia Student Union.

7. The University Retroactive Withdrawal Committee shall render a reasoned written decision, based on the complete and documented written request, within thirty (30) working days of receiving a recommendation from the Faculty or School of Extended Learning Student Request or Independent Student Request Committee.
8. The decisions of the University Retroactive Withdrawal Committee are final.

16.1.9 Graduation

Degree and certificate candidates who expect to complete requirements in a particular year must apply to the Office of the Registrar before July 15 for fall graduation and before January 15 for spring graduation. Students must complete the graduation application online by accessing the Concordia website: myconcordia.ca → MyConcordia Menu → Student Services → Graduation Application. The graduation fee is payable whether or not a student attends convocation.

16.1.10 Student Record

A record is a comprehensive report of a student's academic history at the University. It is a complete academic record and includes all courses followed at Concordia. It is available to the student and to authorized University staff and faculty. Students may obtain a copy of their record from the Birks Student Service Centre during normal operating hours or by written request. For each copy there is a charge of \$3. Students may also access their record through the Concordia website, myconcordia.ca, at no charge.

16.1.11 Transcript

A transcript is a version of a student's record intended for the use of external institutions, organizations, and employers. It is a complete academic record and includes all undergraduate and/or graduate courses followed at Concordia. It is accompanied by an explanation of its terminology and is sent directly to the addressee at the written request of the student, providing there is no outstanding account owing to the University. An official transcript is printed on security paper, and is signed and sealed by the University Registrar.

16.2 CURRICULUM REGULATIONS

16.2.1 Modifications to Academic Programs and Regulations

With the exception of the following conditions, the curriculum requirements in effect at the time students are admitted to a program (e.g. BA, BFA, Certificate in Business Studies) and/or concentration (e.g. major, specialization), are the requirements which apply to them until they complete their program.

1. The University reserves the right to modify academic program requirements in the light of (a) changing trends in academic and professional fields, and (b) the availability of resources. In the exceptional event that a program is substantially altered by the University Senate, the University recognizes its responsibility to offer suitable transition arrangements for students. The new program requirements should become effective for all students no later than five years after the effective date of change for newly admitted students.
2. When a program is discontinued, the University recognizes its responsibility to offer courses in the program while phasing it out according to a schedule appropriate to the needs of the affected students. Students will be informed of the schedule when the decision is made to phase the program out.
When students in a discontinued program have not been registered for three years, it may not be possible to enable them to complete that program. They may, however, transfer into another program in the University for which they meet the admission requirements.
3. Where students acquire credit towards a degree or certificate in a discontinuous manner and over a protracted time, the University reserves the right, at any time, to require them to take further credits or fulfill additional requirements to obtain that degree or certificate.
4. Modifications to the academic regulations in §16.1 and 16.3 become effective for all students on a given date regardless of the student's date of admission to a program, with the following exceptions:
 - 16.1.3 Residence Requirements
 - 16.3.11 Academic Performance
 - 16.3.12 High Academic Achievement

Modifications to these three regulations apply only to students admitted or readmitted to a program on or after the effective date of such modifications.

5. In the event a student is readmitted after failing an academic year, the University reserves the right to require the student to take additional credits or to repeat certain courses. The student is also subject to changes in academic regulations or program requirements in effect at the time of the student's readmission.
6. Notwithstanding the above, all students in Engineering programs are required to meet the Canadian Engineering Accreditation Board (CEAB) standards. Students are required to graduate having met the substantial equivalent of the curriculum in force in the winter term prior to degree conferral. It is the student's responsibility to ensure that their course selection meets the program requirements for their graduation. For further information, see §71.10.7.

16.2.2 Degree Regulations

The regulations relating to degree requirements are located in the Faculty sections:

Faculty of Arts and Science	Section 31
John Molson School of Business	Section 61
Faculty of Engineering and Computer Science	Section 71
Faculty of Fine Arts	Section 81

16.2.3 Concentration Requirements

Every undergraduate program requires a cohesive sequence of courses. To graduate in a degree program, a student must have completed one of the following concentrations: honours, specialization, major. In the Faculty of Engineering and Computer Science, concentrations are referred to as programs. Most of these programs have options, where students take a number of related courses in a chosen area. Honours is a highly concentrated program with a required performance level; the specialization and the major require varying degrees of concentration, normally without a performance requirement. An honours, specialization, or major can be combined with a minor. In some circumstances, a double major is also possible.

1. Honours Programs

The University offers programs leading to an honours degree in certain disciplines. The honours program consists of 60 or more credits in a discipline, with superior performance required to enter and remain in the program. In their first year, students may register in honours program courses, but their acceptance as honours **students** will depend on their performance. Students who do not meet requirements for honours standing may proceed in either a specialization or a major program.

These regulations are the minimum academic standards for honours programs. The programs and particular Faculty regulations are listed in the Faculty sections under "Honours Programs."

1. An honours student must meet general degree requirements and the specific requirements for an honours program.
2. An honours student must maintain a grade point average (GPA) of 3.00 in all honours courses; the minimum acceptable grade in any honours course is "C."
3. An honours student must have a minimum GPA of 2.70 for honours courses taken each year. For part-time students this is calculated in 18-credit blocks.
4. In non-honours courses, an honours student must have a GPA of no less than 2.00.
5. Honours students who do not meet these standards will be withdrawn from the honours program and will proceed in the major or specialization program. Reinstatement in the honours program is possible only with the permission of the Faculty Honours Committee.

2. Specialization Programs

A specialization, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 60 or more credits. In a few cases it includes a performance requirement. In addition to courses in a particular discipline, the specialization may include courses in other closely related fields.

3. Major Programs

A major, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 36 or more credits, except in the John Molson School of Business where the major consists of at least 24 credits in a particular discipline in addition to the required 42-credit core. The major may include certain courses in other closely related fields.

4. Minor Programs

A minor, as recommended by the Conseil des Universités du Québec, is a sequence of courses totalling 24 or more credits, except in the John Molson School of Business where the minor consists of at least 12 credits in the chosen discipline in addition to the required 42-credit core.

5. Combined Programs

An honours, specialization, or major program may be combined with a minor program. In some circumstances, a major program may also be combined with another major program.

6. Certificate Programs

1. *Faculty* – An undergraduate certificate is a coherent program, usually of 30 credits, made up of regular undergraduate courses. Courses taken as part of a certificate program are normally applicable to the appropriate undergraduate degree. There is no guarantee that a certificate program can be completed in one academic year.
2. *School of Extended Learning (SEL)* – The Complementary University Credit (CUC) certificates offered by the School employ a competency-based learning approach. The course learning outcomes focus on the acquisition of specific skills that are immediately transferable to the professional work environment. SEL courses taken as part of the CUC certificate are not transferable to programs offered by a Faculty.

16.2.4 Writing Skills Requirement

The University is reviewing its Writing Skills Requirement.

The **University Writing Test** has been suspended effective May 1, 2008.

The Engineering Writing Test has not been suspended. (See §71.20.7.)

16.3 EVALUATION, GRADING SYSTEM, EXAMINATIONS, AND PERFORMANCE REQUIREMENTS

16.3.1 Evaluation

A university degree or certificate certifies that its holder has attained a measurable level of achievement as established by a recognized system of evaluation. Thus the performance of each student in each course must be evaluated by the instructor or instructors responsible for the course.

Final grades are determined by students' performance on one or more of the following:

1. Assigned work, term papers, projects, etc.
2. Class participation which, in certain disciplines, may justify an attendance requirement
3. Progress tests
4. Laboratory tests and/or laboratory work
5. Mid-term and/or final examinations
6. Level of written expression.

The weight accorded to the various elements is at the discretion of the instructor or instructors responsible for the course.

At the beginning of a course the instructor will provide students with the evaluation scheme in writing. The scheme cannot be altered without appropriate notice.

Normally in the winter and summer terms, an instructor will submit final grades no later than seven calendar days after the scheduled final examination in a course or, where there is no final examination, seven calendar days after the last scheduled class in a course. All final grades for all courses are *required* to be submitted no later than seven calendar days after the University's last scheduled final examination. In the case of grades for potential graduates, instructors are *required* to submit final grades no later than three calendar days after the scheduled final examination in a course or, where there is no final examination, three calendar days after the last scheduled class in a course. For the fall term, all final grades for all courses are *required* to be submitted three days after the commencement of the winter term. There may be additional delays before grades are posted as approvals of the grades and processing time are necessary. Students may obtain their grades through the Concordia website at myconcordia.ca.

Final grades and grade changes are official only when they have been approved by the appropriate Faculty or School of Extended Learning Dean or delegate. The University reserves the right to make corrections at any time in case of error.

16.3.2 Language of Instruction and Examinations

While courses at Concordia University are normally taught in English, if students prefer, they may write assignments and examinations in either English or French. However, language and literature courses may require assignments and examinations to be written in the language being studied. Students who wish to write in French should ask at the beginning of a course whether their instructor can read French or whether someone else will evaluate their work. If the work must be read by another person, extra time may be needed.

16.3.3 Grading System

At the end of each course, the instructor will submit a letter grade for every student registered. Using the grade point equivalents listed below, grade point averages (GPA) are calculated for the evaluation of academic achievement, honours standing, prizes, and academic standing.

Grade	Grade Points	
A+ } A } A- }	4.30 } 4.00 } 3.70 }	Outstanding
B+ } B } B- }	3.30 } 3.00 } 2.70 }	Very Good
C+ } C } C- }	2.30 } 2.00 } 1.70 }	Satisfactory
D+ } D } D- }	1.30 } 1.00 } 0.70 }	Marginal Pass
F, FNS	0	Poor — Failure
R	0	Very Poor — Failure
Grade Not Reported (NR)	0	

Passing courses required to fulfill curriculum requirements is not sufficient to graduate as there is also an academic performance requirement (grade point average) in most degree and certificate programs. See the pertinent section of each Faculty's entry in the Calendar for complete details:

Faculty of Arts and Science	Section 31
John Molson School of Business	Section 61
Faculty of Engineering and Computer Science	Section 71
Faculty of Fine Arts	Section 81
School of Extended Learning	Section 21

16.3.4 Failing Grades and Administrative Notations

Failing Grades "F," "FNS," "R," and "NR" notations

1. "F" indicates failure in a course in which a supplemental examination is available.
2. "FNS" indicates failure in a course in which no supplemental examination is available.
3. In a course graded "R," a student is not permitted to write a supplemental examination, apply for a "MED" or "DEF" notation, or complete work late.
4. Not Reported "NR" indicates that a student appears to have unofficially withdrawn from a course. It is assigned by the Registrar when no material is available to evaluate and the instructor has been unable to submit a grade. "NR" carries a grade point value of zero and counts as a failure.
In a course with an "NR," a student is not permitted to apply for a "MED" or "DEF" notation, write deferred or supplemental examinations, or complete work late.

16.3.5 Administrative Notations "CUC," "DEF," "DISC," "DNE," "DNW," "EREM," "INC," "MED," "PEND," "REPT," "RPT," "TREM," "WRKT"

1. Complementary University Credits "CUC" are credits earned as part of a Complementary University Credit certificate. These credits are not considered as program credits earned in any other degree or Faculty certificate program or Independent studies.
2. Deferred "DEF" indicates that a student has been unable to write a final examination due to unforeseeable circumstances beyond the student's control. A "DEF" notation carries no grade point value.
For information on how to apply for "DEF" notations and the regulations which govern them, see §16.3.8 I.
3. Discontinued "DISC" indicates that a student has properly withdrawn from a course after the end of the course-change period. The notation appears permanently on academic records and official transcripts. It carries no grade point value and does not count in assessments of academic standing, but does count towards a student's status (i.e. full- and part-time).
4. Did Not Enter "DNE" is a temporary notation indicating that a student has officially withdrawn from a course by the deadline for withdrawal with tuition refund. The course and "DNE" notation are subsequently removed from a student's record.
5. Did Not Write "DNW" indicates that a student has not written the final examination for a course. The notation is used only in combination with a letter grade (such as "F/DNW," "B/DNW").
A student in good standing may write a supplemental examination (if available) in a course with a "DNW" unless the grade is "R/DNW" or "FNS/DNW."
For information on how to apply for supplemental examinations and the regulations which govern them, see §16.3.8 III.
6. Exemption Received Credit Removed "EREM" indicates that the credit earned for this course cannot be retained because it is a repetition of a course for which the student has already received exemption.
7. Incomplete "INC" indicates that a student has not completed required course work, such as a term paper, assignment, or laboratory and that the instructor has agreed to accept the work after the due date. The notation is used only in combination with a letter grade (such as "F/INC," "C/INC") and is assigned on the basis that the missing work is weighted as zero.
When appropriate, "DNW" and "INC" can be used simultaneously (e.g. "F/INC/DNW").
For information on how to apply to complete courses with an "INC" notation, and the regulations which govern late completion, see §16.3.6.
8. Medical "MED" indicates that a student has been unable to write a final examination or complete other assignments due to a long-term medical situation. A "MED" notation carries no grade point value.
For information on how to apply for "MED" notations and the regulations which govern them, see §16.3.8 II.
9. Pending "PEND" indicates that the grade is not available at this time.
10. Repeat "REPT" indicates that the credit earned for this course cannot be retained because it is a repetition of a course or of similar course material.
11. Report "RPT" indicates report work completed by a student in a co-operative education program. These credits are not considered as program credits earned.
12. Transfer Credit Received, Credits Removed "TREM" indicates that the credit earned for this course cannot be retained because it is a repetition of a course for which transfer credit has already been awarded.
13. Work Term "WRKT" indicates work completed by a student during a co-operative education work term. These credits are not considered as program credits earned.

16.3.6 Late Completion of Courses with “INC” Notations — Procedures and Regulations

1. The deadlines for completion of course assignments are given to students on the first day of class. The “INC” notation is assigned when an instructor has agreed that a student may complete work after the deadline.
2. A student with an “R” grade or “NR” notation in a course may not apply for late completion in that course.
3. Students must apply for late completion of a course. *Applications for Late Completion* are available at the Birks Student Service Centre. For each course there is a charge of \$20. Completed applications must be returned to the Birks Student Service Centre by:
February 1: Fall-term courses
May 15: Winter and fall/winter courses
September 1: Summer-session courses
4. The completed work must be submitted by:
February 15: Fall-term courses
May 30: Winter and fall/winter courses
September 15: Summer-session courses
5. It is the responsibility of the instructor to submit a final grade within five days of these dates.

16.3.7 In Progress “IP” Notations — Procedures and Regulations — Faculty of Arts and Science

1. The IP notation is assigned when an instructor has agreed that the work of a student in a course may be submitted past the time for reporting grades. At the undergraduate level the IP notation is applicable only to the completion of an honours thesis, internship or fieldwork outside of the University, or directed study or research. Students should refer to §31.003.3 for a list of applicable courses within the Faculty of Arts and Science. In all cases, due to third party involvement in course work, it is beyond the control of the instructor and/or the student for the student to complete the work within the required deadline.
2. The completed work must be submitted by:
April 1: Fall-term courses
August 1: Winter and fall/winter courses
December 1: Summer-session courses
3. It is the responsibility of the instructor to submit a final grade within 10 days of these dates.
4. If the completed work is not submitted by the stated deadline, the IP notation will be changed to a letter grade.

16.3.8 Deferred “DEF,” Medical “MED” Notations and Supplemental Examinations — Procedures and Regulations

I. Deferred “DEF” Notations

1. A student who has missed a final examination due to unforeseeable circumstances beyond his or her control can apply to have his or her original grade replaced by a temporary “DEF” notation. The original grade assigned must include a “DNW” notation.
Note: Unforeseeable and/or extraordinary circumstances may include, but are not limited to, a serious illness or severe injury; a recent death in one’s immediate family; unexpectedly assuming responsibility of an immediate family member due to serious illness; severe emotional stress; fire. Personal travel is not an acceptable reason to be granted a “DEF” notation. In the case of work commitments or religious observations, see §16.3.10.1.4.
2. A “DEF” notation cannot be assigned in a course with an “R” or “NR” notation.
3. Application forms for “DEF” notations are available from the Birks Student Service Centre. **A completed application must be submitted to the Birks Student Service Centre, not to the instructor, department, Faculty, or the School of Extended Learning,** by January 15 for fall courses (/2), May 15 for fall/winter courses (/3 and /4) or August 31 for summer courses (/1). The application must be accompanied by a Concordia medical certificate or, if the reasons are not medical, by other appropriate documents indicating that the student was unable to write an examination on the day or days in question. If the required documentation is not available before the application deadline, the student should submit the request form and provide the supporting material as soon as possible.
Please note that in the case of absence due to short-term medical situations, the student must visit his or her medical practitioner **on or before** the date of the missed exam. Additionally, by submitting the Concordia medical certificate, the student authorizes the University to verify its legitimacy. Tampering, altering, or modifying the Concordia medical certificate in any way could lead to charges brought against the student under the Code of Rights and Responsibilities and/or the Academic Code of Conduct.
4. The application for a “DEF” notation must be accompanied by a \$25 per course processing fee.
5. The Registration and Examinations Office is entitled to ask the student to provide additional information.
6. When the Registration and Examinations Office approves the awarding of the “DEF” notation, it will temporarily replace the student’s original grade for the course or courses concerned. The student is then entitled to write a deferred examination. For information about deferred examinations, see §16.3.10 II.
7. When the deferred examination has been completed and evaluated, a new grade will replace the “DEF” notation.

8. When a student receiving the privilege of writing a deferred examination does not write the examination during the specified period, the privilege will be withdrawn and a final grade in the course will be recorded by the Office of the Registrar according to the grade achieved by the student before the "DEF" notation was granted.
9. Requests for deferred examinations can be made in a maximum of three (3) exam sessions during a student's undergraduate or Independent studies at Concordia. Requests which exceed this number will be submitted to the University Examinations Committee for consideration. Refer to numbers 3, 4, and 5 of this section for information on the application process and deadlines.

II. Medical "MED" Notations

1. A student who has missed a final examination and/or been unable to complete course assignments due to a long-term medical situation can apply to have his or her original grade replaced by a "MED" notation. The original grade must include the "DNW" notation for a missed final examination; "INC" for course assignments not completed; "DNW/INC" when both elements are missing.
2. A "MED" notation cannot be assigned in a course with an "R" grade or "NR" notation.
3. Application forms for "MED" notations are available from the Birks Student Service Centre. **A completed application should be submitted to the Birks Student Service Centre, not to the instructor, department, Faculty, or the School of Extended Learning**, by January 15 for fall courses (/2), May 15 for fall/winter courses (/3 and /4), or August 31 for summer courses (/1). The application should be accompanied by a medical certificate on a physician's original letterhead indicating that a long-term medical situation prohibited the student from being able to complete the final examination on the day or days in question. If the required documentation is not available before the application deadline, the student should submit the request form and provide the supporting material as soon as possible.
4. The application for a "MED" notation must be accompanied by a \$25 per course processing fee.
5. The Registration and Examinations Office is entitled to ask the student to provide additional medical information.
6. When the Registration and Examinations Office approves the acceptance of a medical certificate, the notation "MED" will replace the student's original grade for the course or courses concerned. For information about "MED" replacement examinations, see §16.3.10 II.
7. When the replacement examination or missing work has been completed and evaluated, a new grade will replace the "MED" notation. If the student does not write a replacement examination or complete the missing work, the "MED" notation will appear permanently on his or her record and transcript (e.g. "MED/DNW" or "MED/INC"). "MED" notations carry no grade point value. Courses with "MED" notations are not included in assessments of academic standing.
8. When a student repeatedly submits medical certificates, the University reserves the right to refer him or her to a physician appointed by the University for a recommendation.

III. Supplemental Examinations – Regulations

1. Each Faculty and the School of Extended Learning determines for which of its courses a supplemental examination is offered.
2. A student must be in acceptable standing in order to write a supplemental examination.
3. A student is permitted to write only one supplemental examination for a course, whether or not the course is being repeated.
4. A student who has received a passing grade for a course may not write a supplemental examination for that course.
5. A student who has received an "NR" or "R" grade may not write a supplemental examination for that course.
6. Applications to write supplemental examinations are available from the Birks Student Service Centre. **A completed application should be submitted to the Birks Student Service Centre, not to the instructor, department, Faculty, or the School of Extended Learning**, by June 15 for fall/winter courses (/2, /3 and /4), September 16 for summer courses (/1) or February 1 for graduating students (fall-term courses [/2] only).
7. The application for a supplemental examination must be accompanied by a \$35 fee for each course. The supplemental fee is refundable only if the student is denied permission to write the supplemental.

16.3.9 Academic Re-evaluation

I. General

1. Concordia University affirms the right of students to request the re-evaluation of course work which includes tests, examinations, essays and other work that has contributed to the grading of a course. It is assumed that initiating a formal re-evaluation ("a re-evaluation request") is a last recourse, taken when prior and sincere attempts to resolve problems and disagreements informally and directly have failed.
2. Students have the right to see their course work. Students are responsible for the preservation of any material, in its entire and original form, which has been returned to them. A re-evaluation request may be refused if this material is not available.
3. Instructors are responsible for the preservation of course work that has not been returned to students as follows: until December 31 of the next calendar year for fall-term courses; until April 30 of the next calendar year for fall/winter and winter-term courses; and until August 31 of the next calendar year for summer-term courses.
4. In cases where grades are received for activities other than written or artistic course work, such as class participation, oral presentations, oral examinations and performance, no re-evaluation is normally possible. However, every attempt shall be made by the instructor concerned and the Chair of the Department or, in the case of a course offered by the School of Extended Learning, the Director of the Student Transition Centre, to address the concerns raised by the student.
5. The grounds for a re-evaluation request are restricted to claims that i) a miscalculation of the grade occurred; or ii) the evaluation of the work was demonstrably unfair.
6. A grade may be maintained, raised or lowered as a result of a re-evaluation request.

II. Procedure

7. Students who are dissatisfied with the grade received on one or more pieces of course work shall first attempt to meet with the instructor and explain their position. If the student remains dissatisfied or is unable to meet with the instructor, he or she may, upon receiving the final grade for the course, make a re-evaluation request.
8. A re-evaluation request shall be made on an "Academic Re-evaluation Request" form available at the Birks Student Service Centre. The student shall specify the reasons for seeking the re-evaluation and shall indicate what informal attempts towards re-evaluation have been made. A processing fee must accompany the request. (See the Tuition and Fees website at tuitionandfees.concordia.ca for the current fee.)
9. A re-evaluation request with respect to a fall-term course must be made no later than the following February 1; with respect to a fall/winter or winter-term course, no later than the following June 15 and with respect to a summer-term course, no later than the following October 1. These deadlines may be extended by the Registrar in particular cases if the student can provide evidence that he or she was unable to have acted within the deadlines.
10. The Registrar shall forward the re-evaluation request to the Chair of the appropriate Department.
11. The Chair shall decide whether the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above within ten (10) days of receiving the re-evaluation request.
12. If the Chair decides that the re-evaluation request does not conform to the criteria outlined in articles 4 and 5 above, he or she shall communicate this decision with reasons, in writing, to the student with a copy to the Registrar. Should the student disagree with this decision, he or she has the right to appeal the Chair's decision to Re-evaluation Appeals Panel as set out in article 25 below.
13. Requests for review or other consideration which do not conform to the grounds for a re-evaluation request may fall under the purview of the Chair, the Dean, the Student Request Committee or other mechanisms.
14. If the Chair decides that the re-evaluation request conforms to the criteria outlined in articles 4 and 5 above, he or she shall appoint a re-evaluator whose name shall be communicated to the student and to the instructor concerned. Normally, the re-evaluator shall not be an instructor in whose course the student is registered at that time.
15. Before the re-evaluation begins, the instructor shall provide the Chair with information regarding the nature and structure of the course as well as the evaluation criteria and methods used. The Chair shall communicate this information to the re-evaluator.
16. The entire piece of work identified by the student shall be re-evaluated. The re-evaluator may request additional input from the student or the instructor.
17. The re-evaluation shall normally be completed within thirty (30) days of the Chair's decision that the re-evaluation shall proceed. If it becomes clear that the thirty (30) day delay cannot be met, the Chair shall immediately communicate this information to the student in order to determine whether any serious difficulties may arise from extending the delay. In the case where the thirty (30) day delay is extended, every effort shall be made to remedy any academic disadvantage that the student may experience as a consequence of the extension of the delay.
18. Upon completion of the re-evaluation, the re-evaluator shall assign a grade to the work in question and shall forward the re-evaluated material to the Chair along with a reasoned report. The reasoned report shall make mention of the documentation and methodology used.
The Chair shall communicate the re-evaluation decision, in writing, along with the reasoned report, to the student, the instructor and the Registrar, as well as whether the final grade for the course will be modified as a result of the re-evaluation decision.
19. In cases where there is a significant discrepancy between the original grade assigned and the grade assigned by the re-evaluator, the Chair may convene a meeting with the instructor and the re-evaluator in order to discuss the issue before communicating the decision to the parties concerned. If disagreement as to the discrepancy remains after the meeting, the re-evaluator's grade shall stand.
20. In cases where the re-evaluation decision reveals a generalized flaw in the original evaluation process, the Chair shall take appropriate steps to ensure that the grades of other students in the course are reviewed and modified if appropriate.
21. A final grade that is modified as a result of the re-evaluation shall be entered onto the student's academic record and transcript. If no appeal is filed, the modified grade shall permanently replace the original grade on the student's academic record and transcript. If an appeal is filed, an interim notation to the effect that the grade is "under appeal" shall accompany the grade until the final disposition of the case.

III. Appeals

22. A permanent Secretary of the Re-evaluation Appeals Panel (RAP) (the Secretary) shall be appointed by the Secretary-General. The Secretary shall be responsible for the administrative functioning of the RAP and shall maintain the confidential files of the RAP.
23. A RAP of three (3) members, as well as a non-voting Chair, shall be selected by the Secretary for a given appeal. The RAP shall be composed of two (2) faculty members drawn from the Faculty Tribunal Pool and one (1) student drawn from the Student Tribunal Pool as provided for under the Policy for the Establishment of Tribunal Hearing Pools. Every attempt will be made to select the student member from the student's constituency (undergraduate or graduate status).
24. A student or instructor may appeal a re-evaluation decision based on either substantive grounds or on the presence of serious and prejudicial procedural defects. In the case of an appeal from an instructor, "prejudicial" shall be limited to the effect that the alleged procedural defect has on other students in the course or on the academic standards of the University. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary within fifteen (15) days after the date of transmission of the re-evaluation decision.

25. A student may appeal a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above. This appeal may be based on either substantive grounds or on the presence of serious and prejudicial procedural defects in the Chair's consideration of the re-evaluation request. The appeal must state in clear and precise terms the grounds on which the appeal is based. Such an appeal must be made, in writing, to the Secretary within fifteen (15) days after the date of transmission of the Chair's decision.
26. Upon receipt of an appeal from a student, the Secretary shall send a copy to the Registrar, the Chair, the instructor and the re-evaluator, if appropriate, soliciting their input within ten (10) days. Any input received within the ten (10) day period shall be forwarded to all parties, soliciting their comments on the input within a further ten (10) days. All input and comments received within the twenty (20) day period shall form part of the dossier submitted to the RAP.
Upon receipt of an appeal from an instructor, the Secretary shall send a copy to the Registrar, the Chair, the student and the re-evaluator, if appropriate, soliciting their input within ten (10) days. Any input received within the ten (10) day period shall be forwarded to all parties, soliciting their comments on the input within a further ten (10) days. All input and comments received within the twenty (20) day period shall form part of the dossier submitted to the RAP.
27. The RAP shall render a decision, based on the written record only, normally within thirty (30) days of the filing of an appeal. The RAP shall meet at least once in person before rendering its reasoned decision.
28. In the case of an appeal of a re-evaluation decision, should the RAP determine that serious and prejudicial procedural defects were present in the re-evaluation process or that there are substantive grounds necessitating a new re-evaluation, it shall instruct the Chair to arrange for a new re-evaluation.
29. Should the RAP decide that an appeal be upheld in the case of an appeal of a Chair's decision that the re-evaluation request did not conform to the criteria outlined in articles 4 and 5 above, it shall instruct the Dean to arrange for a re-evaluation independent of the relevant Chair.
30. The RAP shall communicate its signed, dated and reasoned decision to the student, the instructor, the re-evaluator (if appropriate), the Chair and the Registrar and shall include copies of all documentation considered.
31. The decision of the RAP is final.

IV. Miscellaneous Provisions

32. The word "days" is defined as working days which excludes weekends, holidays and other days during which the University is closed.
In the calculation of any delay set out in these procedures, the months of July and August shall not be taken into account. In the case of an appeal submitted to the RAP before July 1, the regular delays set out in these procedures shall apply.
33. Any written notice addressed to a student pursuant to Section III – Appeals under these procedures shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after delivery.
34. If the course in question was taught by the Chair, the Dean shall assume all of the duties imposed on the Chair in these procedures. If the course in question does not form part of a department, the re-evaluation request shall be forwarded to the appropriate administrator responsible for the course.
35. The overall responsibility for the implementation and recommended amendments to these procedures shall rest with the Provost and Vice-President.

16.3.10 Examinations

Students must present identification in order to write any examination. Acceptable identification is: Concordia student ID card; photo- and signature-bearing Medicare card or driver's licence. Unless expressly permitted by the instructor, the possession of electronic communication devices is prohibited during examinations.

I. Final Examinations

1. Academic Calendar §11 lists the official examination periods.
2. Examination schedules are posted outside H 110 and MB lobby (SGW Campus) and CC 214 (LOY Campus); on kiosks throughout the campuses; or through the Concordia website at myconcordia.ca.
3. Since special arrangements cannot be made in the event of personal time conflicts (including personal travel plans), students should not make commitments for the examination periods until after the final schedule is posted. Nonetheless, in certain documented circumstances, a student who will not be in the Montreal area during the official final examination period can request to write his/her examination at another university or college.
A student who needs to write at an external institution must submit a "Request to Write a Concordia University Exam at an External Institution" available from the Birks Student Service Centre. The completed request should be submitted to the Birks Student Service Centre within the following deadlines:
November 15: for December final examination period
April 1: for April-May final examination period
June 1: for June final examination period
August 1: for August final and replacement/supplemental examination period
The request must be accompanied by a \$10 per course processing fee.
Among the factors considered in the review of the request is the suitability of the testing location, testing conditions, and time constraints. The institution chosen must be an accredited university or college and the proctor/invigilator must be an employee of that institution and must agree to administer the exam(s) at the exact same date and time as scheduled at Concordia University and time differences must be taken into account.
The student is responsible for any fees that may be charged by the external institution.

4. An examination "conflict" is defined as two examinations scheduled at the exact same day and time or three examinations scheduled in consecutive time blocks (9:00-12:00, 14:00-17:00, 19:00-22:00; 14:00-17:00, 19:00-22:00, 9:00-12:00; 19:00-22:00, 9:00-12:00, 14:00-17:00). Two examinations in one day or three examinations in 24 hours are not considered a "conflict." When the final examination schedule indicates that a student has a "conflict" as defined above, information on how to resolve the conflict is available on the kiosks located throughout the campuses; or through the Concordia website at myconcordia.ca.
The Registration and Examinations Office will make every effort to resolve the "conflict" by providing an "alternate" examination provided they are advised of the conflict by the deadline. "Alternates" are usually scheduled for the first Sunday immediately following the original examination date.
Students who cannot write an examination due to work commitments or religious observations may also request permission to write an "alternate" by reporting their conflict and providing the appropriate documentation in support of their request. Further information is available by contacting the Registration and Examinations Office. Also see §16.3.10.III.3.
5. No student will be admitted to the exam room if his/her name does not appear on the roster of students assigned to write in that room.
6. No candidate will be permitted to enter an examination room after the first third of the examination has elapsed, or to leave before the first third of the examination has elapsed:
 - 3 hour examination: no entry after first 60 minutes has elapsed;
no exit before first 60 minutes has elapsed
 - 2.5 hour examination: no entry after first 50 minutes has elapsed;
no exit before first 50 minutes has elapsed
 - 2 hour examination: no entry after first 40 minutes has elapsed;
no exit before first 40 minutes has elapsed
 - 1.5 hour examination: no entry after first 30 minutes has elapsed;
no exit before first 30 minutes has elapsed
 - 1 hour examination: no entry after first 20 minutes has elapsed;
no exit before first 20 minutes has elapsed
7. Students will be assigned to a specific desk/seat location.
8. Student ID cards will be collected at the time of "signing-in" and will be returned when "signing-out."
9. Students may not leave the exam room during the last 15 minutes.
10. **If during the course of an examination a student becomes ill, the student should report at once to the invigilator, hand in the unfinished paper and request that the examination be cancelled. Before leaving the University, the student must also visit the Temporary Examinations Office location in order that a report of the situation may be filed. If physical and/or emotional ill-health is the cause, the student must then report at once to a physician/counsellor so that subsequent application for a deferred examination is supported by medical documentation.**
11. If a student completes an examination, even though he/she is ill or faced with other personal problems or situations, the subsequent grade obtained in the course must stand. Petitions on the grounds of illness **will not be considered**.
12. In the fall and winter terms, no tests or examinations are permitted in the final week of classes. Any exceptions must be approved in advance by the appropriate Faculty Council.

II. Deferred, Replacement and Supplemental Examinations – Regulations

The University Examinations Committee is comprised of one faculty member from each Faculty, a student representative, the Director of Health Services, and a representative from the Office of the Registrar.

1. Deferred Examinations

- a) A student who did not write a final examination and has been granted a "DEF" notation is permitted to write a deferred examination.
- b) A deferred examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.
- c) When a student receiving the privilege of writing a deferred examination does not write the examination during the specified period, the privilege will be withdrawn and a final grade in the course will be recorded by the Office of the Registrar according to the grade achieved by the student before the "DEF" notation was granted.
- d) An examination cannot normally be deferred a second time. A student who is prevented from writing the deferred exam due to extraordinary circumstances may apply to the University Examinations Committee for a retroactive "DISC" in the course. The Committee's decisions are final.
- e) When a deferred examination has been written and evaluated, the grade is added to the student's marks for other course work. The resulting final grade will replace the "DEF" notation on the student's academic record and transcript.
- f) A student who fails a course after writing a deferred examination may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS" and all other criteria for writing a supplemental have been met (see §16.3.8 III).
- g) A student cannot write a deferred examination in a course with a grade of "R" or "NR."

2. Replacement Examinations

- a) A student who did not write a final examination and has been granted a "MED" notation is permitted to write a replacement examination.
- b) A replacement examination counts for the same weight in the course evaluation scheme and covers the same course material as the original examination.

- c) When a student does not write a replacement examination, no further examination, replacement or supplemental, will be scheduled. However, students who were prevented from writing the replacement examination due to extraordinary circumstances will be able to apply to the University Examinations Committee. If the Committee approves such a request, the student will be granted a retroactive "DISC." The Committee's decisions are final.
- d) When a replacement examination is not written, the "MED" notation (e.g. "MED/DNW") will appear permanently on the student record and transcript.
- e) When a replacement examination has been written and evaluated, the grade is added to the student's marks for other course work. The resulting final grade will replace the "MED" notation on the student's academic record and transcript.
- f) A student who fails a course after writing a replacement examination, may have one opportunity to write a supplemental examination during the next scheduled supplemental examination period provided the original grade was not "FNS" and all other criteria for writing a supplemental have been met (see §16.3.8 III).
- g) A student cannot write a replacement examination in a course with a grade of "R" or "NR."

3. Supplemental Examinations

- a) A student who applies for and satisfies all the requirements is permitted to write a supplemental examination.
- b) Whether or not a supplemental examination is written, the original grade for the course ("F," "F/DNW") will remain permanently on the student's academic record and transcript.
- c) The grades from both attempts (first attempt and the supplemental exam) are included in calculating grade point averages and assessments of academic standing.
- d) A student who fails a supplemental examination is given a grade of "R." A student who does not write a supplemental examination is not assigned a second failing grade for the course.
- e) When a student does not write a supplemental examination, no further examination, replacement or supplemental, will be scheduled. However, students who were prevented from writing the supplemental examination due to extraordinary circumstances will be able to apply to the University Examinations Committee.
- f) The University Examinations Committee is comprised of one faculty member from each Faculty, a student representative, a representative from the Office of the Provost, and a representative from the Office of the Registrar. The Committee's decisions are final.
- g) John Molson School of Business and the Faculty of Engineering and Computer Science: There are no supplemental examinations available for courses offered in these Faculties, other than for COMP 201 and COMP 218.

III. Deferred, Replacement, Supplemental, and Alternate Examination Periods

Deferred, replacement, supplemental, and alternate examinations are written at various times throughout the year.

1. Deferred/Replacement Examinations

- a) John Molson School of Business and Faculty of Engineering and Computer Science: Deferred examinations for courses offered in these Faculties are written the next time the course is offered. For potential graduates in Engineering and Computer Science, if there is no examination scheduled for the course in question in the term before graduation, a deferred examination would be made available during the final examination period of that term.
- b) Faculties of Arts and Science, Fine Arts, and the School of Extended Learning: Deferred examinations for courses in these Faculties are written during the next regular examination period **provided** the course is given in the next term **and** that a final examination is scheduled.
If the course is not offered or there is no examination scheduled for the course in question in the subsequent examination cycle, the deferred examination would be scheduled during the next replacement examination period (February [mid-term break], August, October).

2. Supplemental Examinations

- a) John Molson School of Business and Faculty of Engineering and Computer Science: There are no supplemental examinations available for courses offered in these Faculties, other than for COMP 201 and COMP 218.
- b) Faculties of Arts and Science, Fine Arts, and the School of Extended Learning: Supplemental examinations for fall/winter courses (/2, /3, and /4) are normally written in late August. For summer session courses (/1) supplemental examinations are usually written in October. Graduating students may write supplemental examinations in February for fall courses (/2) only.

3. Alternate Examinations

- a) When an academic department requests that students from all sections of a particular course be examined at the same date and time, this is known as a "common" exam.
- b) Because the scheduling of these "common" exams may conflict with the scheduling of other exams, an "alternate" exam can be made available. This "alternate" exam is a second exam covering the same material and is usually scheduled for the first Sunday immediately following the regular exam date.
- c) Courses with only one section will rarely have an "alternate" available to resolve conflicts.

- 4. In certain documented circumstances, a student who will not be in the Montreal area during the deferred, replacement, supplemental, or alternate examination period can request to write his/her examination at another university or college. For information on writing examinations at an external institution, see §16.3.10.I.

16.3.11 Academic Performance

I. Performance Regulations

Students are required to maintain an acceptable standard of scholarship. Each student's academic standing is assessed at the end of every year on the basis of an annual weighted grade point average (WGPA) as defined below. The specific regulations applicable to students registered in each Faculty can be found in the following sections of the Calendar:

<u>Faculty/School</u>	<u>See Calendar Section</u>	<u>System Used</u>
Faculty of Arts and Science	31.003.1	WGPA
John Molson School of Business	61.22.1	WGPA
Faculty of Engineering and Computer Science	71.10.3	WGPA
Faculty of Fine Arts	81.20.4	WGPA
School of Extended Learning	21.1.2	WGPA

These regulations may be modified in the case of students transferring either between Faculties or from another university.

II. Weighted Grade Point Average

a) Annual Grade Point Average

An annual weighted grade point average (WGPA) for each student is calculated at the end of each academic year (including the summer, fall and winter terms), provided that the student has attempted a minimum of 12 credits. If the student has attempted fewer than 12 credits, these credits will be included in the assessment for the following academic year.

When a student transfers from one degree or certificate to another degree or certificate, the WGPA is calculated only for courses recorded in the current degree or certificate. (This calculation normally excludes the grades for any transfer credits awarded.)

Special regulations for graduating students may be specified in each Faculty's regulations.

Grades for supplemental and replacement examinations and for late completion of courses with "INC" or "MED" notations are included in the assessment period in which they are recorded.

In the case of courses taken more than once in the same assessment period, only the grade corresponding to the latest attempt of the course will be used in the calculation of the annual WGPA.

In the Faculty of Engineering and Computer Science, prerequisite courses required for admission to a program will not be counted unless they are specifically listed on the student's acceptance letter.

A grade obtained as the result of a penalty for academic misconduct will remain in the calculation of the annual WGPA whether or not the course has been repeated.

The WGPA is calculated as follows:

First, for each course attempted, the number of credits for the course is multiplied by the grade points obtained for the course, as specified in §16.3.3. Then, the sum of the grade points for all courses is divided by the total credits attempted.

$$\text{WGPA} = \frac{\sum (\text{course credits} \times \text{grade points})}{\sum (\text{credits attempted})}$$

Σ = sum of

Example:

<u>Course</u>	<u>Grade Achieved</u>	<u>Credit Value</u>		<u>Grade Points*</u>	<u>Weighted Grade Points</u>
1	D	3.00	X	1.00	= 3.00
2	C+	3.00	X	2.30	= 6.90
3	B	2.00	X	3.00	= 6.00
4	A-	6.00	X	3.70	= 22.20
5	F	3.00	X	0.00	= 0.00
Total Credits Attempted		17.00		Total Weighted Grade Points	38.10

$$\text{WGPA} = \frac{38.10}{17.00} = 2.24$$

* As detailed in §16.3.3

b) Cumulative Grade Point Average

This is the running total of the GPA since a student was admitted to the most recent degree (or certificate) program. It includes the same courses as were included in the calculation of the annual weighted grade point average, and the courses for which "transfer credit" with an accompanying grade has been awarded in the new program. In the case of repeated courses, only the grade corresponding to the latest attempt of the course will be used in the calculation of the cumulative GPA.

A grade obtained as the result of a penalty for academic misconduct will remain in the calculation of the cumulative GPA whether or not the course has been repeated.

The cumulative GPA is used as the basis to determine eligibility for high academic achievement (§16.3.12).

c) Final Graduation Grade Point Average

This is a cumulative GPA of all courses applicable to the new degree program being completed. In the case of transfer students, all courses taken at Concordia and transferred with the corresponding grades into the program being completed will be included in calculating the final graduation GPA. This GPA is calculated and recorded on the record only when a student graduates.

In the case of repeated courses, only the grade corresponding to the latest attempt of the course will be used in the calculation of the final graduation GPA.

A grade obtained as the result of a penalty for academic misconduct will remain in the calculation of the final graduation GPA whether or not the course has been repeated.

The final graduation GPA is used as the basis to determine eligibility for high academic achievement (§16.3.12).

III. Qualifying Programs and Visiting Students

Students registered in Qualifying programs or as Visiting students are subject to the regulations of the Faculty in which they are registered.

IV. Independent Students

1. Independent students are subject to the same grade point average requirements as students registered in programs offered by the Faculty of Arts and Science. (See §31.003.1)
2. Independent students who are classified as failed may not reregister without permission of the Registrar.

V. Regulations for Failed Students and Students in Conditional Standing

1. Failed students or students in conditional standing are not eligible to write supplemental examinations.
2. Undergraduate students who are classified as failed may not reregister as Independent students.

VI. Recording of Failed and Conditional Standing

Assessment of academic standing is noted on the student record and transcript.

16.3.12 High Academic Achievement

A degree "With Distinction" or "With Great Distinction" will be awarded to students who obtain final graduation grade point averages (GGPA) of at least 3.40 or 4.00 respectively.

The final graduation grade point average is calculated based on courses taken in the program being completed, including Concordia courses transferred into this program with their corresponding grades, as determined by guidelines of the Office of the Registrar. In the case of external transfer students, all courses taken at Concordia will be included in calculating the final graduation GPA.

16.3.13 Repetition of Courses

1. A student may repeat a failed course only once. However, a student who fails a required course twice may appeal to the appropriate Student Request Committee for permission to take the course a third time. If permission is not granted, the student may not be allowed to continue in the University towards that program and/or degree.
 2. A student who has received a passing grade for a course may repeat the course for personal reasons (e.g. to meet an external requirement) only once. A student may appeal to the appropriate Student Request Committee for permission to take the course a third time. The student's record and transcript will include all grades, but grades with the "REPT" notation will carry no credit value.
 3. A student who wants or needs to repeat a course that is prerequisite to other courses must do so *before* taking any following course in the sequence.
 4. The grade corresponding to the latest attempt of the course will be used for calculating the cumulative GPA and the final graduation GPA.
 5. In the case of courses taken more than once in the same assessment period, only the grade corresponding to the latest attempt of the course will be used in the calculation of the annual WGPA.
 6. A grade obtained as the result of a penalty for academic misconduct will remain in the calculation of the annual WGPA, the cumulative GPA, and the final graduation GPA whether or not the course has been repeated.
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17.10 Academic Integrity and the Academic Code of Conduct

17.10.1 ACADEMIC INTEGRITY

17.10.2 UNDERSTANDING AND UPHOLDING ACADEMIC INTEGRITY

17.10.3 ACADEMIC CODE OF CONDUCT

17.20 Policy on the Establishment of Tribunal Hearing Pools

17.30 Rights and Responsibilities

17.40 Ombuds Office

Section 17

17.10.1 ACADEMIC INTEGRITY

Academic integrity is key to academic success at Concordia University. More specifically, "The integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. Therefore, for their part, all students are expected to be honest in all of their academic endeavours and relationships with the University."

(Academic Code of Conduct, article 1)

17.10.2 UNDERSTANDING AND UPHOLDING ACADEMIC INTEGRITY

Concordia University has several resources available to students to better understand and uphold academic integrity. Concordia's website on academic integrity can be found at the following address, which also includes links to each Faculty and the School of Graduate Studies: provost.concordia.ca/academicintegrity.

The definitions, procedures, and sanctions related to charges of academic offences are outlined in the Academic Code of Conduct.

17.10.3 ACADEMIC CODE OF CONDUCT

I. Preamble

Introduction

1. The integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. Therefore, for their part, all students are expected to be honest in all of their academic endeavours and relationships with the University.

Jurisdiction

2. For the purposes of this Code, the student need only have been a student at the time of the alleged offence.
3. If, prior to the initiation of any proceedings under this Code, the student has graduated, the proceedings shall continue.
4. Neither the withdrawal by a student from a degree, diploma or certificate program or from a course, nor the termination of that student's program by his/her department shall affect the filing of an Incident Report or any process provided for under this Code. If a student withdraws from the course, the Registrar will replace the withdrawal (DISC) notation by a pending (PEND) notation until the outcome of the charge is finalized.

Ambiguity

5. Wherever there is doubt or ambiguity regarding any provision of this Code or the procedure to be followed, that interpretation or procedure which appears to be most equitable and consistent with the general purposes and philosophy of this Code shall be adopted. Except for those terms specifically defined in this Code, the terms used shall have their usual meanings.

II. Definitions

Student

6. Student is defined as:
 - a. any person registered in the University whether for courses or research and whether or not a candidate for a degree, diploma or certificate;
 - b. persons once registered in the University who are under suspension from the University;
 - c. persons registered during a preceding academic term.

Days

7. Days is defined as working days which excludes weekends, holidays, and other days during which the University is closed as listed in the Undergraduate and Graduate Calendars.

Dean

8. Dean is defined as:
 - a. the Dean of the Faculty or School offering the program in which the student is registered; or
 - b. if the student is not registered in a program, the Dean of the Faculty or School providing the course concerned or in the event that the offence is not related to a particular course, the Dean of the Faculty or School providing the most credits on the student's record; or
 - c. if the student is a graduate student, the Dean of the School of Graduate Studies.The Dean may designate a delegate to fulfil any of his or her obligations under this Code. If the course concerned is taught by the Dean, the Provost and Vice-President, Academic Affairs shall assume all of the duties imposed on the Dean in this Code.

Invigilator

9. Invigilator means an instructor or any other person who is charged with supervising an evaluative exercise.

Examination

10. Examination means any evaluative exercise including tests, quizzes and like assignments as well as site supervised examinations and non-site supervised examinations.

Administrator

11. Administrator, as allowed for in article 27, means those individuals who through the normal course of their duties at the University may encounter possible incidents of academic misconduct. Examples of an administrator may include, but are not restricted to: Office of the Registrar or Admissions personnel, Graduate Program Directors, Associate Deans, re-evaluators (see Academic Re-evaluation Procedures) and academic department staff.

Secretary of the Academic Hearing Panel

12. A Secretary of the Academic Hearing Panel shall be named and shall be responsible for the administrative functioning of the Academic Hearing Panels, including maintaining the confidential files and recordings of proceedings of the hearing panels.

Secretary of the Appeals Panel

13. A Secretary of the Appeals Panel shall be named and shall be responsible for the administrative functioning of the Appeals Panels, including maintaining the confidential files of the Appeals Panels. The Secretary of the Appeals Panel shall not be the same individual as named in article 12.

III. Offences

14. Any form of cheating, plagiarism, personation, falsification of a document as well as any other form of dishonest behaviour related to the obtention of academic gain or the avoidance of evaluative exercises committed by a student is an academic offence under this Code.
15. Any attempt at or participation related in any way to an academic offence is also an offence under this Code and shall be dealt with in accordance with the procedures set out in this Code.
16. Without limiting, or restricting, the generality of article 14 above and with the understanding that articles 16 a) to l) are to be considered examples only, academic offences include the carrying out, or attempting to carry out or participating in:
- a. plagiarism — the presentation of the work of another person, in whatever form, as one's own or without proper acknowledgement;
 - b. the contribution by one student to another student of work with the knowledge that the latter may submit the work in part or in whole as his or her own;
 - c. unauthorized collaboration between students;
 - d. tearing or mutilating an examination booklet, inserting pages into a booklet or taking a booklet from the examination room;
 - e. multiple submission — the submission of a piece of work for evaluative purposes when that work has been or is currently being submitted for evaluative purposes in another course at the University or in another teaching institution without the knowledge and permission of the instructor or instructors involved;
 - f. the obtention by theft or any other means of the questions and/or answers of an examination or of any other University-related resource that one is not authorized to possess;
 - g. the possession or use during an examination of any non-authorized documents or materials or possessing a device allowing access to or use of any non-authorized documents or materials;
 - h. the use of another person's examination during an examination;
 - i. communication with anyone other than an invigilator during an examination or the obtention of any non-authorized assistance during an examination;
 - j. personation — assuming the identity of another person or having another person assume one's own identity;
 - k. the falsification of a document, in particular a document transmitted to the University or a document of the University, whether transmitted or not to a third party, whatever the circumstances;
 - l. the falsification of a fact or research data in a work including a reference to a source, which has been fabricated. Falsification shall not include those factors intrinsic to the process of academic research such as honest error, conflicting data or differences in interpretation or judgement of data or of experimental design.

IV. Procedures**Provisions Governing Examinations**

17. It is the duty of an invigilator to take action under the following articles when he or she becomes aware of any suspected academic offence.
18. Every examination paper shall expressly list the materials and equipment that a student is permitted to have and use during the examination and shall indicate any special conditions relating to the examination.
19. Except if expressly authorized by the invigilator, a student may not speak or otherwise communicate with any person other than an invigilator.

Centrally Supervised Examinations

20. Where an examination is supervised by the Office of the Registrar or where another central supervisory function is available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and shall be required to leave the examination area.

21. Communication with the student shall be restricted to requesting that he or she, in a written statement, choose one of the following options on a completed Academic Code of Conduct Incident Report ("Incident Report"), see Appendix A (a copy of which is available on the following website: <http://secretariat.concordia.ca/policies/bd/en/BD-3.pdf>):
 - a. to withdraw from the examination with the understanding that if the charge is dismissed, the student shall be permitted to take another examination for the same course at a mutually agreed upon time but no later than one calendar year from the date of the filing of the Incident Report; or
 - b. to continue the examination under controlled conditions in another location in which case the invigilator shall provide a fresh examination booklet and shall allow additional time for the examination to compensate for any time lost. The student shall continue the examination from the point at which he or she was required to leave the examination area; or
 - c. to acknowledge that the exam has been completed.
22. Should the student not indicate a choice, he or she shall be considered to have chosen to withdraw from the examination. Until such time as the student has indicated that he or she has chosen to withdraw from the examination or is deemed to have done so, he or she remains under examination conditions.
23. The invigilator shall file an Incident Report with the Dean, as defined in article 8 of this Code, and shall include all examination materials as well as any other evidence related to the suspected academic offence. The invigilator may not, on his or her own authority, impose a sanction on the student.

Other Examinations

24. Where an examination is not supervised by the Office of the Registrar or where another central supervisory function is not available to deal with allegations of offences related to examinations, a student who is suspected of an academic offence shall be so informed by the invigilator and may be required to leave the examination area immediately. The invigilator shall file an Incident Report with the Dean, as defined in article 8 of this Code, and shall include all examination materials as well as any other evidence related to the suspected academic offence. The invigilator may not, on his or her own authority, impose a sanction on the student.

Non-Examination Related Offences

25. An instructor who, in the course of grading a student's work or through any other means, has reasonable grounds to believe that a student in the instructor's course or working under his or her direction has committed a non-examination related offence shall complete an Incident Report. The instructor shall forward the Incident Report to the Dean as defined in article 8 of this Code. The instructor may not, on his or her own authority, impose a sanction on the student. In the interim, and until there is a final outcome of any proceedings under this Code, the instructor shall enter a pending notation.
26. Should a person other than an instructor, as named in article 25, have reasonable grounds to believe that a student has committed a non-examination related offence, he or she may report his or her findings to the Department Chair, or equivalent. If the Chair, or equivalent, finds that there are reasonable grounds, he or she shall complete an Incident Report. The Chair, or equivalent, shall forward the Incident Report to the Dean as defined in article 8 of this Code. The Chair, or equivalent, may not, on his or her own authority, impose a sanction on the student.
27. Any administrator of the University who to his or her personal knowledge or upon reliable report has reasonable grounds to believe that a student has committed a non-examination related offence shall complete an Incident Report. The administrator shall forward the Incident Report to the Dean as defined in article 8 of this Code. The administrator may not, on his or her own authority, impose a sanction on the student.

Interviews

28. Upon receipt of an Incident Report, the Dean shall send a copy to the student, the Registrar and the Secretary of the Academic Hearing Panel and shall indicate whether he or she intends to interview the student to inquire into the alleged offence or whether the Incident Report is being transmitted directly to an Academic Hearing Panel. The Dean shall, as well, include a copy of this Code.
29. Should the Dean decide to interview the student, the interview shall normally take place within fifteen (15) days of the Dean's receipt of the Incident Report. Whenever possible, five (5) days notice shall be given to the student before the interview. In convening the interview with the student, the Dean shall inform the student of his or her right to consult any person and to be accompanied or represented by a student advocate from the Student Advocate Program, the CSU Student Advocacy Centre or any other member of the University community.
30. When the Dean has decided not to interview the student and to transmit the Incident Report directly to an Academic Hearing Panel such transmission shall take place within fifteen (15) days of receipt of the Incident Report.
31. At the outset of the interview, the Dean shall inform the student that he or she is not obliged to answer any of the Dean's questions and that any answers given may become the basis for an immediate disposition of the case under article 32 or cause the Dean to refer the case to an Academic Hearing Panel or be the subject of testimony by both parties at any subsequent proceeding. The standard of proof to be relied upon by the Dean shall be one of a "preponderance of evidence" as defined in article 49.
32. Within ten (10) days from the conclusion of the interview, the Dean shall write to the student indicating his or her decision to dismiss the charge or, in the case of upholding the charge, to impose one or more of the following sanctions:
 - a. Reprimand the student;
 - b. Direct that a piece of work be resubmitted;
 - c. Enter a grade of "0" for the piece of work in question;
 - d. Enter a grade reduction in the course;
 - e. Enter a failing grade for the course;

- f. Enter a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;
- g. Impose the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's program as specified by the Dean. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a program;

After the interview, the Dean also has the option to refer the case directly to an Academic Hearing Panel, which must be done in all cases of repeat offences.

In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained.

Where the Dean has decided to dismiss the charge, the Dean shall direct the instructor to submit a grade for the course in question, if applicable.

- 33. In the case of a sanction imposed by the Dean under article 32, the letter to the student shall inform him or her of the right to obtain a full hearing before an Academic Hearing Panel by notifying the Secretary of the Academic Hearing Panel (the Secretary), in writing, within ten (10) days after the date of transmission of the Dean's decision. A copy of the Dean's letter shall be sent to the Secretary, the Registrar, the instructor and the Department Chair, or equivalent, if applicable.
When the Dean has decided to dismiss the charge against the student, a copy of the letter dismissing the charge shall be sent to the Secretary, the Registrar, the instructor and the Departmental Chair, or equivalent, if applicable.
- 34. Where the Dean has imposed a sanction under article 32 and the student has not elected to obtain a full hearing under article 33, the Secretary shall, within a reasonable time, so notify the Dean and the Dean shall file a report with the Registrar containing the following:
 - a. identification of the student concerned;
 - b. a statement of the facts and findings;
 - c. a statement of the course of action taken;
 - d. a statement to the effect that the student concerned was notified in writing of the action taken and of his or her right to a full hearing before an Academic Hearing Panel. Such report shall form a part of the student's permanent file maintained by the Registrar.
- 35. When the student has elected to obtain a full hearing under article 33, the execution of any decision of the Dean shall be suspended pending disposition by an Academic Hearing Panel. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.

Composition of the Academic Hearing Panels

- 36. An Academic Hearing Panel ("AHP") of five (5) members, as well as a non-voting Chair, shall be selected by the Secretary for a given hearing. The AHP shall be composed of three (3) faculty members drawn from the Faculty Tribunal Pool and two (2) students drawn from the Student Tribunal Pool provided for under the *Policy on the Establishment of Tribunal Hearing Pools* (BD-6). Every attempt will be made to select at least one (1) faculty member and one (1) student from the student's constituency (i.e. by faculty and undergraduate or graduate status).
- 37. In the absence of one or more panellists and with the consent of both parties, it shall be permitted to proceed with a reduced Panel. A reduced AHP shall be composed of the non-voting Chair as well as two (2) faculty members and one (1) student.

Procedures Before an Academic Hearing Panel

- 38. Once a matter has been referred to the Secretary, he or she shall convene an AHP to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the parties.
- 39. A hearing shall be convened as soon as possible after the receipt by the Secretary of the notification and normally within fifteen (15) days. Once a hearing date is fixed by the Secretary, both parties shall submit any documentation they wish considered to the Secretary no later than ten (10) days before the scheduled hearing date. Such documentation shall include all supporting documents, including any submitted during the interview process, and a list of the witnesses, if any, that will appear. The Secretary shall transmit the documentation, together with a list of the Panel members selected for the case, to the parties no later than five (5) days before the scheduled hearing date.
- 40. When not already evident from the case file, the Secretary shall inform the student of his or her right to consult any person and to be accompanied or represented by a student advocate from the Student Advocate Program, the CSU Student Advocacy Centre or any other member of the University community.
- 41. Either party may object to the participation of a Panel member on the grounds of potential bias. A reasoned objection shall be filed with the Secretary in writing at least three (3) days prior to the hearing date. The Secretary shall arrange for an alternate Panel member to serve if he or she determines that the objection is well-founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair of the AHP who shall render a final decision in this regard.
- 42. When the offence involves more than one student, either the students(s) or the Dean(s) may request that the Secretary schedule a joint hearing. If the request is initiated by the student(s), it shall be made at the time of his or her initial hearing request. A request from the Dean(s) shall be made following receipt of the student's hearing request notification. The consent of the other party and each of the students called upon to participate shall be obtained prior to proceeding with a Joint Hearing. The AHP has the discretion to uphold or dismiss the charge against each student and to apply the appropriate individual sanction.
- 43. If a student wishes to withdraw his or her request for a hearing, normally the student shall notify the Secretary of the withdrawal at least seven (7) days prior to the hearing date. Following such a withdrawal, the Dean shall file a report with the Registrar, according to article 34, and include the information that the student withdrew his or her request for a hearing.

The Hearing

44. The AHP shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, evidence and witnesses called by the parties (expert or otherwise), the right of cross-examination, questioning by members of the AHP, representations with respect to desired sanctions and closing statements. Hearings shall be recorded and the cassettes kept as part of the permanent record of the proceedings for a period of not less than five (5) years.
45. The role of the Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair shall, as well, preside over the deliberations of the AHP but shall not vote. Decisions shall be by majority vote. The hearing shall be closed unless both parties have consented in writing to the attendance of members of the University community.
46. The instructor in the course in which the offence took place, if applicable, may be present throughout the hearing or may be called as a witness by either of the parties.
47. If the student fails to attend the hearing, the hearing may proceed in the student's absence or, at the Chair's discretion the start of the hearing may be postponed. If the hearing proceeds in the student's absence, all rights contingent on the student's presence, with the exception of the right to have an advocate present to plead for postponement, are forfeited. In such a case, a student's right of appeal is limited to a consideration of the reasonableness of his or her excuse for not appearing. If an Appeals Panel finds that the excuse is reasonable, it shall order a new hearing by a new AHP with the student present. The decision of the new hearing with the student present is appealable as if it were a first hearing.
48. At a hearing for a student charged with a repeat offence, other than the fact that a previous charge has been upheld and is, therefore, relevant in relation to article 52, any and all other information concerning the charge(s) shall be excluded, including the nature of the offence(s) and the sanction(s) imposed.
49. The decision of the AHP shall be signed, dated and reasoned. The standard of proof to be relied upon by the AHP shall be one of a "preponderance of evidence". A "preponderance of evidence" standard means that the Dean must establish that his or her version of the facts is significantly more probable.

Sanctions

50. Within ten (10) days from the conclusion of the hearing, the AHP shall write to the student and the Dean, with a copy to the Registrar, indicating its decision to dismiss the charge against the student or, in the case of upholding the charge, to impose one or more of the following sanctions:
 - a. Reprimand the student;
 - b. Direct that a piece of work be resubmitted;
 - c. Enter a grade of "0" for the piece of work in question;
 - d. Enter a grade reduction in the course;
 - e. Enter a failing grade for the course;
 - f. Enter a failing grade and ineligibility for a supplemental examination or any other evaluative exercise for the course;
 - g. Impose the obligation to take and pass courses of up to twenty-four (24) credits in addition to the total number of credits required for the student's program as specified by the Dean. If the student is registered as an Independent student, the sanction will be imposed only if he or she applies and is accepted into a program;
 - h. Impose a suspension for a period not to exceed six (6) academic terms. Suspensions shall entail the withdrawal of all University privileges, including the right to enter and be upon University premises;
 - i. Expulsion from the University. Expulsion entails the permanent termination of all University privileges.In the case of a student who has graduated, the only two available sanctions are i) a notation on the student's academic record that he or she has been found guilty of academic misconduct; or ii) a recommendation to Senate for the revocation of the degree obtained.
51. A sanction of suspension or expulsion is subject to confirmation by the Provost and Vice-President, Academic Affairs, who shall also determine the effective date.
52. Any student found to have committed a second academic offence shall be expelled from the University subject to confirmation by the Provost and Vice-President, Academic Affairs.
53. The decision of the AHP shall inform the parties of their right to seek an appeal from an Appeals Panel within fifteen (15) days after the date of transmission of the AHP decision.
54. Where neither the Dean nor the student has sought an appeal from an Appeals Panel within the stipulated delay, the Secretary shall so inform the Registrar including a statement to the effect that the Dean and the student concerned were notified in writing of the action taken and of their right to seek an appeal from an Appeals Panel. Such report shall form a part of the student's permanent file maintained by the Registrar. This notification shall be sent to the Dean and the student.
55. The execution of any sanctions by an AHP shall be suspended until the expiry of the delay to seek an appeal or until the rendering of the decision by an Appeals Panel if an appeal is heard. In such cases, the imposition of the sanction of a failing grade shall not be taken into account when calculating the student's grade point average.

Appeals

56. Should either the student or the Dean wish to seek an appeal from a decision or sanction of an AHP, he or she shall apply in writing to the Secretary for the authorization to seek an appeal within fifteen (15) days after the date of transmission of the AHP decision. An Appeals Panel shall decide whether an appeal shall be heard having regard to the circumstances of each case.
57. Such request for authorization to appeal may be based only on the grounds of discovery of new evidence following the rendering of the decision of the AHP or on the presence of serious and prejudicial procedural defects of the AHP. The request shall state in clear and precise terms the grounds on which the appeal is based. The Appeals Panel shall be provided with the complete file of the AHP and its decision shall be based on the written record only.

58. An Appeals Panel of three (3) members, as well as a non-voting Chair, shall be selected by the Secretary for a given appeal. The Appeals Panel shall be composed of two (2) faculty members drawn from the Faculty Tribunal Pool and one (1) student drawn from the Student Tribunal Pool. Every attempt will be made to select the student member from the student's constituency (undergraduate or graduate status).
59. An Appeals Panel shall be convened as soon as possible after receipt of the authorization request by the Secretary and normally within fifteen (15) days. It shall normally render its decision with respect to the request within five (5) days of its consideration of the request.
60. If the authorization to appeal is granted, the appeal shall normally be heard within fifteen (15) days of the decision to authorize the appeal. Notification of such shall be sent to both parties.
61. The Appeals Panel has the authority to confirm, reverse or modify the decision being appealed. Further, should the appeal be based on the production of new evidence, the Appeals Panel may order a new hearing of the case by a new AHP.
62. The Appeals Panel shall normally render its decision within ten (10) days of the hearing. The decision of the Appeals Panel shall be signed, dated and reasoned and shall be sent to both parties and the Registrar.
63. The decision of the Appeals Panel shall be final.
64. In the case of the denial of an appeal where the sanction imposed by the AHP was suspension or expulsion, the suspension or expulsion shall take effect on a date to be determined by the Provost and Vice-President, Academic Affairs.

V. Miscellaneous Provisions

Delays and Language

65. In the calculation of any delay set out in the Code, the months of July and August shall not be taken into account. In the case of a hearing before an AHP or an Appeals Panel that commenced before July 1, the regular delays set out in this Code shall apply.
66. Students may participate in interviews conducted under article 29 in either English or French. Further, any party or witness participating in a hearing before an AHP or an Appeals Panel may make their presentation in either English or French. If an interpreter is required to satisfy the preceding, the request shall be made at the same time as the initial AHP request made in accordance with article 33.

Notices

67. Any written notice addressed to a student under this Code shall be sent by courier to the last address provided by the student to the University and shall be deemed to be received one (1) day after delivery.

Notations on Academic Record and Transcript

68. When a charge of academic misconduct has been upheld, the charge and the sanctions shall be reflected on the student's academic record with the sanction appearing as the appropriate article (32 or 50) and the additional notation of "for academic and disciplinary reasons". When the sanction imposed is either 32 (g) or 50 (g), the number of extra credits imposed shall also be noted.
69. Sanctions of a failing grade in a course; a failing grade in a course and further ineligibility for a supplemental examination and the obligation to take extra courses shall be reflected on the student's academic transcript with no additional notations relating to academic misconduct. A grade obtained as the result of a penalty for academic misconduct shall remain in the calculation of the Annual WGPA, the Cumulative GPA and the Final Graduation GPA, whether or not the course has been repeated.
70. Suspensions imposed under this Code shall be recorded on the academic record and the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not resume studies until [date]". At the date for resumption of studies, the notation shall be removed from the student's academic transcript but shall continue to appear on the student's academic record.
71. The President may, upon written request from a student and in cases where the President considers it appropriate, direct that a sanction, with the exception of expulsion, be removed from the student's academic record. Such written request can be made no sooner than five (5) years after the sanction has been imposed.
72. Any expulsion imposed under this Code shall be recorded on the academic record and the academic transcript as follows: "Required to withdraw for academic and disciplinary reasons. May not apply for readmission".
73. In cases where a sanction has been imposed but a student has requested either a full hearing before an AHP or has sought an appeal from an Appeals Panel which has not been disposed of, the Registrar shall note on the academic record that both the grade and the sanction are "pending" until both the hearing and appeal process have been completed.
74. Further to article 73, in the case of a sanction of suspension or expulsion, the Registrar shall note on the academic transcript that the sanction is "pending".
75. No degree, diploma or certificate of the University shall be conferred or awarded from the time of the alleged offence until the final disposition of the charge.

Records and Confidentiality

76. The Registrar shall maintain a record in the student's official file with respect to all sanctions imposed under this Code.
77. In all cases where a charge of academic misconduct has been upheld, the responsibility for maintaining the complete file shall rest with the Dean.
78. All records shall be kept in strictest confidence and shall only be communicated to the student concerned and to other persons within the University having a legitimate interest or duty to take communication of them. In the event that a charge is dismissed at any level provided for in the Code, all information relating to the charge will be removed from the files held by the Faculty and the Registrar and will have no effect on a student's academic record or future

academic activities. However, in accordance with the legislation governing the keeping of records, a record of the charge and its dismissal will be kept in a confidential file by the Secretary and will be destroyed within the time-frame outlined by the University's archives retention rules.

79. Nothing contained in this section shall be interpreted as preventing the Registrar or any other University member from responding to a court order requiring the disclosure of information or statements obtained in the course of an interview or hearing conducted under this Code.

Annual Report

80. An annual report detailing the number of charges laid under this Code and their disposition shall be prepared by the Secretary and presented to Senate by September 30 of each year. The report shall be published in the University's newspaper. In no circumstances shall any mention be made of the names of the parties involved nor of any information, which might lead to their identification.

Overall Responsibility for Code

81. The overall responsibility for the implementation and recommended amendments to this Code shall rest with the Secretary-General. The Secretary-General shall transmit an information sheet to each Dean and Chair at the beginning of the Fall Term each year outlining the general framework of this Code.
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17.20

POLICY ON THE ESTABLISHMENT OF TRIBUNAL HEARING POOLS

General

1. This policy deals with the establishment of tribunal hearing pools for hearings, both first-level hearings as well as appeal hearings, provided for in the Code of Rights and Responsibilities, the Academic Code of Conduct (including cases heard under the previous Code of Conduct – Academic), the Academic Re-evaluation Procedures, the Graduate Academic Appeals Procedures and any other codes or policies which may be adopted that refer to the Tribunal Hearing Pools provided for under this policy.
2. In the event that a hearing or appeal panel cannot be convened from the membership of the Student Tribunal Pool, the Faculty Tribunal Pool, the Administrative and Support Staff Tribunal Pool or the Pool of Chairs, as outlined below, the Secretary-General shall designate the membership of the relevant hearing or appeal panel for a given case.

Student Tribunal Pool

3. In June of each year, the Concordia Student Union Inc. shall be asked to nominate up to a maximum of fifteen (15) undergraduate students and the Graduate Student Association shall be asked to nominate up to a maximum of ten (10) graduate students to form the Student Tribunal Pool (STP).
4. In order to be eligible, students shall be registered in an undergraduate or graduate program and be in good standing. Students who are in failed standing, in conditional standing or on academic probation or who have been sanctioned under the Code of Rights and Responsibilities, or the Academic Code of Conduct (including cases heard under the previous Code of Conduct – Academic) within the three (3) years previous to their nomination are not eligible. The status and standing of student nominees shall be confirmed by the University Registrar in September prior to the submission of the list of nominees for approval to Senate by the Secretary of Senate. In addition, the status and standing of members of the STP shall be confirmed by the University Registrar each September for as long as the member remains in office.
5. The term of office of members of the STP shall be for two (2) years, from September 1 to August 31, and shall be renewable. Members remain in office until replaced.

Faculty Tribunal Pool

6. The Council of the Faculty of Arts and Science shall nominate thirteen (13) faculty members, the Council of the John Molson School of Business shall nominate six (6) faculty members, the Council of the Faculty of Engineering and Computer Science shall nominate five (5) faculty members, the Council of the Faculty of Fine Arts shall nominate three (3) faculty members and the Council of the School of Graduate Studies shall nominate eight (8) faculty members, for a total of thirty-five (35) faculty members, to comprise the Faculty Tribunal Pool (FTP).
7. The term of office of members of the FTP shall be for two (2) years, from September 1 to August 31, and shall be renewable. Members remain in office until replaced.
8. The Secretary of each Faculty Council and the Council of the School of Graduate Studies shall forward a list of nominees to the Secretary of Senate prior to its September meeting for approval.

Administrative and Support Staff Tribunal Pool

9. The Administrative and Support Staff Tribunal Pool (AaSSTP) shall be comprised of five (5) members nominated in accordance with the Electoral College Policy. Administrative and support staff members from the Office of the Vice-President, Institutional Relations and Secretary-General, the Office of the General Counsel, the Office of Student Tribunals, the Ombuds Office and the Office of Rights and Responsibilities shall not be eligible for membership on the AaSSTP.
10. The term of office of members of the AaSSTP shall be for two (2) years, from September 1 to August 31, and shall be renewable. Members remain in office until replaced.
11. The Department of Human Resources shall forward a list of nominees to the Secretary of the Board of Governors prior to its September meeting for approval.

Chairs

12. In addition to the members of the STP and FTP appointed by Senate, and the members of the AaSSTP appointed by the Board, Senate shall appoint as many individuals as necessary to serve as non-voting Chairs of the various tribunal panels dealt with under this policy.
13. The role of the Chairs shall be to preside over the various tribunal panels, keep order and ensure fairness. The Chairs shall, as well, preside over the deliberations of the various tribunal panels but shall not vote.

14. Because the role of the Chairs of the various tribunal panels requires impartiality and particular skills which take time to develop and cannot easily be acquired by lay persons during a brief term of office, the Chairs shall normally be selected from qualified alumni or emeriti who have training in law or tribunal procedures as well as some knowledge of the University environment.
15. The term of office for Chairs shall be for two (2) years, from September 1 to August 31, and shall be renewable.
16. The candidates for the Chairs shall be recommended to Senate by the University General Counsel in consultation with the secretaries of the tribunal panels dealt with under this policy. Curriculum vitae of the candidates shall accompany the recommendation.

Training

17. All members of the STP, FTP and AaSSTP, and all Chairs shall receive training, prepared and conducted jointly by the secretaries of the tribunal panels dealt with under this policy under the supervision of the University General Counsel.
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17.30

RIGHTS AND RESPONSIBILITIES

Director and Senior Advisor, Rights and Responsibilities
LOUISE J. SHILLER

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CODE OF RIGHTS AND RESPONSIBILITIES

Section I: Statement of Principles

The Code of Rights and Responsibilities

1. The Code of Rights and Responsibilities ("the Code") has, as its grounding principles, the values of civility, equity, respect, non-discrimination and an appreciation of diversity as manifested within Concordia University ("the University") and within society-at-large.

Rights Promoted and Protected by the Code

2. All Members of the University, as defined in Section III of the Code, may reasonably expect to pursue their work, studies and other activities related to University life in a safe and civil environment. As such, neither the University nor any of its Members shall condone any conduct which adversely affects the University or any of its Members.
3. All Members have the freedom of conscience and religion; freedom of thought, belief, opinion and expression; freedom of peaceful assembly and freedom of association, the whole subject to the limits recognized by law and University policies and procedures.

Academic Freedom

4. The Code is not to be applied in such a way as to detract from the right of Members to engage in the frank discussion of potentially controversial matters, such as race, sex, sexual orientation, gender identity, politics or religion. Furthermore, the Code shall not be interpreted in such a way as to limit the use of legitimate instructional techniques, such as irony, argument, conjecture and refutation, or the assignment of readings, which may present a controversial point of view. The Code also recognizes the right to teach, within the bounds of the course calendar description and requirements of competence, and to conduct research and to engage in creative activity according to one's best judgment.

Responsibilities

5. All Members are expected to refrain from violating the Code and those who have supervisory authority over others bear a particular responsibility to act in a timely and effective manner when they become aware of any alleged violation of the Code.

Complaints Subject to a Range of Responses

6. In keeping with its desire to settle conflicts in an effective and constructive manner, the University and its Members shall endeavour to seek an appropriate response to any alleged violations of the Code, ranging from the use of informal methods of conflict resolution to formal procedures for adjudicating complaints. Every attempt shall be made to use remedies and sanctions that restore harmony, collegiality and cooperation between Members.

Fairness and Consistency

7. Complaints made under the Code shall be adjudicated in a manner that is consistent with the principles of natural justice and fair for all parties, regardless of constituency. The principles of natural justice may be defined broadly as the right to be heard, the obligation to hear the other side and decisions to be made untainted by bias.

Management Rights

8. The Code is not to be applied in such a way as to detract from the right and duty of those with supervisory authority to manage and, if necessary, to discipline Members in accordance with collective or employee agreements and University policies and procedures.

Union Rights

9. The Code is not to be applied in such a way as to detract from the rights of unions or employee associations to defend the interests of their members and to exercise their rights under a collective or employee agreement.

Recourse at Law

10. The Code does not detract from the right of Members to seek recourse at law.

Code Does Not Supersede Other Policies or Agreements

11. Nothing in the Code shall replace or supersede any complaint, grievance or appeal procedure set out in any collective or employee agreement to which the University is a party, the Academic Code of Conduct, the University Calendars or other University policies or procedures.

Section II: Mandate and Functions of the Office of Rights and Responsibilities and the Advisor

12. The mandate of the Office of Rights and Responsibilities ("the Office") is to assist Members in resolving incidents involving an alleged violation of the Code in an effective and constructive manner. Such assistance is available both to Members who believe that they have been subjected to conduct that violates the Code and to those with supervisory authority who are called upon to respond to incidents of such conduct. The operations of the Office are directed by the Advisor on Rights and Responsibilities ("the Advisor").
13. The Advisor shall actively promote, through education and direct intervention, the values outlined in article 1 while carrying out all duties described in the Code. The Advisor shall be impartial in the exercise of his/her duties, shall respect the confidentiality of all who seek assistance from the Office, and shall do so in a non-judgmental manner. The Administration of the University shall respect the independence of the Office as it carries out its duties.
14. The Advisor shall advise, assist and support Members who are experiencing behavioural problems from another Member, as described in the Offences section of the Code, and shall endeavour to seek an appropriate response to any alleged violation. Responses may range from the use of informal dispute resolution methods to formal procedures for adjudicating complaints.
15. The Advisor may, when warranted, make recommendations to University authorities regarding situations within a unit, department, faculty, or the University as a whole, which have the general effect of violating the rights of Members to pursue his/her work, study and other activities related to University life in a safe and civil manner in keeping with the values espoused by the University and outlined in the Code.
16. The Advisor shall submit an annual report to the Vice-President, Institutional Relations and Secretary-General by November 1 of each year covering the previous academic year. The report shall detail the activities of the Office, including statistics on all complaints received, and make recommendations, as necessary, with regard to either the Code or the operations of the Office. The report shall be published in the University's newspaper and shall be submitted, for information purposes, to the Senate and Board of Governors.
17. If a Member considers that the Advisor has failed to follow the procedures outlined in the Code with respect to any matter to which the Member has been a party, he/she may submit a written complaint, detailing the alleged procedural failure, to the Vice-President, Institutional Relations and Secretary-General. The written complaint shall be investigated and the Member shall be informed of the results of the investigation, normally within fifteen (15) Days of the receipt of the complaint.
18. The Advisor shall be appointed by and shall report to the Vice-President, Institutional Relations and Secretary-General upon the recommendation of an advisory committee, composed of representatives of the University constituencies, including at least one (1) undergraduate and one (1) graduate student, struck for this purpose.
19. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term, the Vice-President, Institutional Relations and Secretary-General shall appoint an appraisal committee, composed of representatives of the University constituencies, including at least one (1) undergraduate and one (1) graduate student, which shall:
 - a) review the operations of the Office;
 - b) make recommendations with respect to the Office;
 - c) make a recommendation with respect to the renewal of the Advisor.This review shall include, but shall not be limited to, consultations with the University community as well as an external appraisal.

Section III: Definitions

20. For the purposes of the Code:

"Authority" means the individual to whom a complaint must be submitted under the terms of a Respondent's collective or employee agreement or relevant University policy.

"Days" means working days, which excludes weekends, holidays and other days during which the University is closed.

"Expulsion" or "to Expel" means the termination of all of the Member's rights and privileges as a Student at the University, including the right to enter and be on University property. Expulsion shall be recorded on the Member's transcript as follows: "Required to withdraw. May request to be considered for readmission after five (5) years from the date of expulsion pursuant to the Code of Rights and Responsibilities." The Student may submit a written request to the Provost and Vice-President, Academic Affairs to be considered for readmission after a period of five (5) years from the date of the expulsion.

"Investigator" refers to a person, external to the University, chosen to conduct an investigation into a complaint of harassment made against a non-Student Member, in accordance with article 108 of the Code.

"Member" means faculty members, employees, administrative and support staff, postdoctoral fellows, members of the administration, students (as defined below) and all other students, interns, stagiaires or researchers including but not limited to exchange students, visiting students, interns or researchers.

"Student" means:

- any person registered in any academic program on a full-time or part-time basis
- any person admitted as an independent student, during the semester in which the person is registered in at least one course as well as the semester immediately following
- any person registered in a non-credit course for the duration of the course only
- any person registered as an Auditor in a credit or non-credit course for the duration of the course only
- any person registered as a student at another university who has written approval from his/her home university to take courses at the University for the semester during which the person is registered in at least one course at the University.

A person ceases to be a Student:

- upon graduation; or
- three consecutive semesters after he/she was last registered in at least one (1) course; or
- at the end of the semester during which such person is declared in failed standing and is no longer entitled to register in any course at the University.

"Suspension" or "to Suspend" means the withdrawal of such University privileges of a Student as are specified by the President or the Hearing Panel. If no particular privileges are specified, "Suspension" shall entail the withdrawal of all University privileges, including the right to write examinations and the right to enter and be upon University premises, in which case the Student may only come upon University premises for a specified purpose, previously authorized in writing by a Disciplinary Officer. Suspension shall be recorded on the academic transcript as follows: "Required to withdraw. May not resume studies until (date)." At the date for resumption of studies, the notation shall be removed from the transcript but shall continue to be maintained in the confidential files of the Dean of Students. The maximum length of a Suspension shall be two (2) years, after which the Student may resume his/her studies at the next possible term, providing that all imposed conditions (if any) have been fulfilled.

Ambiguities

21. Wherever there is doubt or ambiguity regarding any provision of the Code or the procedure to be followed, that interpretation or procedure which appears to be most equitable and consistent with the general purposes and philosophy of the Code shall be adopted. Except for those terms specifically defined in this Code, the terms used shall have their usual meanings.

Section IV: Jurisdiction

22. Complaints with respect to a violation of the Code may be made by Members in relation to the conduct of other Members where the Member complaining ("the Complainant") is directly affected by the conduct in question. As well, the University, through its Disciplinary Officers, may make a complaint on its own behalf against a Member in relation to conduct against another Member or non-Member. The alleged violation must have taken place on University premises, either rented or owned, or on other premises in the course of any University-sponsored activity or event.

Complaints against Former Students

23. In cases involving a Student's conduct, the person need only have been a Student at the time of the alleged violation of the Code. If any proceedings under the Code cannot be initiated or completed because a Student has graduated or ceases to be a Student in accordance with the definition contained in Section III of the Code, the proceedings shall continue if the person registers again or, in the case of a person who has graduated, if the alleged offence, if proven, would impugn the validity of the degree conferred.
24. If a complaint has been upheld against a Student who later graduates or ceases to be a Student in accordance with the definition contained in Section III of the Code, prior to the fulfillment of the sanction imposed, a notation shall be made on his/her academic record only indicating the sanction under the Code and that he/she cannot pursue further studies at the University until such time as the sanction imposed has been fulfilled or until he/she has made suitable arrangements with the Dean of Students to fulfill the sanction.

Contractors, their Employees and Visitors

25. Contractors, their employees and representatives, and visitors to the University as well as any other persons associated with or taking courses at the University or on University premises are expected to conduct themselves in a manner consistent with the Code. Violations of the Code by such persons may be dealt with, where applicable, as potential breaches of contract and, in addition, the President, and any other person designated by the President, may exclude each such person from any University premises and take any other steps that may be appropriate. Should such persons believe that they have been subjected to conduct on University premises in violation of the Code, they may consult the Advisor for advice.

Section V: Offences Prohibited Under the Code

26. The primary purpose of the Code is to promote and protect the values of civility, equity, respect, non-discrimination, and an appreciation of diversity as manifested within the University and to support Members who have experienced, or are experiencing, conduct that violates these fundamental values.
27. No Member who seeks the services of, files a complaint with, or cooperates in any manner with the Advisor, shall be subject to any reprisals for so doing. The procedure set out in the relevant University policy or collective or employee agreement shall be followed in cases of alleged reprisals.
28. The following offences represent the core behaviours the Code wishes to address and are prohibited under this Code:
- a) Harassment
- “Harassment” means:
- all forms of repeated or ongoing unwelcome, vexatious conduct, including but not limited to, sexual harassment, psychological harassment or harassment based on a ground prohibited by law directed towards a Member or a group of Members; and
 - which may or may not be based upon one of the prohibited grounds specified in the Quebec Charter of Human Rights and Freedoms, that is; race, colour, ethnic or national origin, sex, gender identity, pregnancy, sexual orientation, civil status, age, religion, political convictions, language, social condition, handicap or the use of a means to palliate a handicap; and
 - when such conduct has the effect or purpose of unreasonably interfering with a Member’s right to pursue his/her work, study or other activities related to University life in a safe and civil manner or of creating an intimidating or hostile environment for such activities.
- A single serious incidence of such behaviour may constitute harassment if it has the same consequences and if it produces a lasting harmful effect on the Member.
- b) Sexual Harassment
- Sexual harassment means a form of harassment which involves conduct of a sexual nature such as, but not limited to, sexual assault, verbal abuse or threats of a sexual nature, unwelcome sexual invitations or requests, demands for sexual favours or unwelcome and repeated innuendoes or taunting about a Member’s body or appearance when:
- submission to such conduct is made, whether explicitly or implicitly, a term or condition of the Member’s employment or educational progress; or
 - submission to or rejection of such conduct is used as the basis for an employment or academic decision affecting that Member; or
 - such conduct has the effect or purpose of unreasonably interfering with a Member’s right to pursue his/her work, study or other activities related to University life in a safe and civil manner or of creating an intimidating or hostile environment for such activities.
- A single serious incidence of such behaviour may constitute harassment if it has the same consequences and if it produces a lasting harmful effect on the Member.
- c) Psychological Harassment
- “Psychological harassment” is a specific type of harassment formally recognized in the law and means vexatious behaviour in the form of repeated conduct, written or verbal comments, actions or gestures against a Member which:
- are hostile or unwanted; and
 - affect the Member’s dignity or psychological or physical integrity; and
 - have the effect or purpose of unreasonably interfering with a Member’s right to pursue his/her work, study or other activities related to University life in a safe and civil manner or of creating an intimidating or hostile environment for such activities.
- A single serious incidence of such behaviour may constitute psychological harassment if it has the same consequences and if it produces a lasting harmful effect on the Member.
- d) Discrimination
- “Discrimination” means:
- treatment which has the effect or purpose of imposing burdens, barriers, obligations or disadvantages on a Member or group of Members; and
 - for which there is no bona fide and reasonable justification; and
 - when such treatment is based on one of the prohibited grounds specified in the Quebec Charter of Human Rights and Freedoms, that is; race, colour, ethnic or national origin, sex, gender identity, pregnancy, sexual orientation, civil status, age, religion, political convictions, language, social condition, handicap or the use of a means to palliate a handicap.
- e) Communication of Discriminatory Matter
- It is an offense for a Member to engage in the distribution, communication, publication or public exhibition by any means of any matter deemed to be discriminatory or to expose a person or persons to hatred or contempt by reason of the fact that that person or those persons are identifiable on the basis of a prohibited ground of discrimination, as contemplated under the Quebec Charter of Human Rights or under the Canadian Human Rights Act, and for which there is no bona fide and reasonable justification.
- f) Threatening or Violent Conduct
- “Threatening or violent conduct” means:
- assaulting another Member; or
 - threatening another Member or group of Members with bodily harm or causing another Member or group of Members to have reasonable grounds to fear bodily harm; or

- iii. creating, or threatening to create, a condition, which unnecessarily endangers or threatens the health, safety or well-being of another Member or group of Members or threatens the damage or destruction of property.
- 29. The following offences represent conduct injurious to Members, or to the University as a whole, and are prohibited under the Code:
 - a) "Offences against property" means willfully or recklessly taking, having unauthorized possession of, damaging or destroying any property belonging:
 - i. to the University; or
 - ii. to any Member or group of Members when such property is on University premises or on other premises during the course of a University-sponsored activity or event;
 - b) Knowingly furnishing false information, knowingly making a false accusation or knowingly reporting a false emergency to any University Official or Office;
 - c) Maliciously activating fire alarms;
 - d) Bomb threats;
 - e) Theft or abuse of computing facilities or computer time, including but not limited to: logging into or attempting to log into a server or account without authorized access; accessing data or taking any action to obtain, copy, use, misuse, read or change data, information or services not intended for the Member or the Member's use; unauthorized transfer of a file; use of another individual's account or password; use of computing facilities to interfere with the work of another individual or computing system; attempting to probe, scan or test the vulnerability of a system or network; tampering, hacking, modifying or otherwise corrupting or breaching security or authentication measures; transmitting materials that contain malware such as viruses, Trojan horse software, keyboard loggers; or engage in conduct that could damage, disrupt or otherwise impair or interfere with the functionality or the operation of computing facilities or computer;
 - f) Unauthorized entry into any University property;
 - g) Obstruction or disruption of teaching, research, administration, study, student disciplinary procedures or other University activity. Notwithstanding the preceding, Members are free to engage in peaceful and orderly protest, demonstration, and picketing that do not disrupt the functions of the University.
For example, peaceful picketing or other activity in any public space that does not impede access nor interfere with the activities in a class or meeting is an acceptable expression of dissent and shall not be considered an infraction of this article.
 - h) Camping or lodging on University property other than in authorized facilities;
 - i) Forging or, without authority, knowingly altering, using, receiving or possessing University supplies or documents (including without limitation, records, keys, electronic devices or identifications);
 - j) Hazing or any method of pre-initiation or initiation into a student organization or any pastime or amusement engaged in with respect to such an organization which causes, or is likely to cause, bodily danger, physical harm, or personal degradation or disgrace resulting in physical or mental harm;
 - k) Unlawful manufacture, distribution, possession, use, sale or the attempted manufacture, distribution, or sale of controlled substances;
 - l) Possession, use, threatened use, storage, or manufacture of explosives, firebombs, or other destructive devices;
 - m) Possession, use, threatened use, or manufacture of firearms, ammunition, dangerous chemicals or other weapons, except as expressly authorized by law or University regulations;
 - n) Unauthorized use or duplication of the University's name, trademarks, logos or seals; and
 - o) Any other action that is not specifically described in this Section but which is an offence described in any federal, provincial or municipal law or regulation, which occurs in the University context.

Section VI: Informal Resolution of Complaints

Consultation with the Advisor

- 30. The Advisor shall be impartial in the exercise of his/her functions and shall respect the confidentiality of all parties.
- 31. Members who believe that they have been subjected to conduct that violates the Code may consult the Advisor. The primary goal of the consultation is to assist the Complainant in making an informed choice as to the most appropriate method of resolution.
- 32. Normally, a complaint should be filed with the Advisor within three (3) months of the alleged violation. This period may be extended at the discretion of the Advisor when, in his/her opinion, there are serious and compelling reasons to grant the extension. If the person against whom the complaint is made ("the Respondent") is a member of a union or employee association, the Advisor shall inform the Complainant of any delays regarding disciplinary procedures which may be prescribed in the Respondent's collective or employee agreement.
- 33. The Advisor may, upon written notice to the Complainant, refuse to assist in informal resolution or to proceed with a formal complaint, on one or more of the following grounds:
 - a) it is not within the jurisdiction of the Code, in which case the Advisor shall, if appropriate, re-direct the Complainant to the relevant channels for redress; or
 - b) it is trivial, frivolous, vexatious or made in bad faith; or
 - c) it is being dealt with, or has already been dealt with, by another University officer, policy or procedure; or
 - d) it does not appear to be supported by sufficient evidence.
- 34. If the Advisor has refused to proceed with a formal complaint, the Complainant may appeal such a refusal within ten (10) Days of receipt of the Advisor's notice, by submitting a request in writing to the Secretary of the Hearing Panel who will provide a copy of the request to the Advisor. A Hearing Panel shall be convened as soon as possible after receipt of the

notification and normally within ten (10) Days. Once a hearing date is fixed by the Secretary, the Complainant and the Advisor shall each deliver written submissions to the Secretary at least two (2) Days prior to the date fixed for the hearing. The Hearing Panel shall render its reasoned decision based on such written submissions. The Secretary shall advise the Complainant and the Advisor of the names of the panellists no later than five (5) Days before the hearing. The provisions of Section VII shall apply, except that a reasoned objection to the participation of a panellist on the grounds of potential bias shall be filed no later than three (3) Days before the hearing. The decision of the Hearing Panel is final.

35. If the Advisor does not make a determination under article 33, the Complainant shall decide upon one of the following courses of action:
 - a) to proceed with informal conflict resolution; or
 - b) to proceed with a formal process under Section VII or Section VIII; or
 - c) to take no further action; or
 - d) to pursue any other course of action available at law, under a collective or employee agreement or under any other University policies or procedures.

Procedures for Informal Resolution

36. If the Complainant opts to proceed with informal conflict resolution, he/she may authorize the Advisor to take steps to attempt an informal resolution. Such steps may take a variety of forms, for example, helping to clarify perceptions, raising awareness of the impact of certain conduct, reconciling differences or sorting out misunderstandings. The parties may be brought together or communication may be effected through the Advisor.
37. Where the situation lends itself to structured mediation and both parties agree, the Advisor may personally act as mediator, or may assist the parties in obtaining the services of another Member who is qualified to perform this function.
38. Any informal agreement reached between the parties through informal conflict resolution is entirely voluntary. Neither the Advisor nor any other mediator has the authority to impose conditions or sanctions upon either party.
39. The Complainant may withdraw the complaint at any point during the process of informal resolution. As well, the Advisor may withdraw from the informal process if he/she determines that no useful purpose will be achieved by continuing.
40. Normally, attempts at informal resolution shall not last longer than three (3) months.

Referral to the Dean of Students

41. Where a concern has been raised about a Student's conduct, and, in the opinion of the Advisor, it cannot be adequately addressed using the range of informal options described in article 36, the Advisor may, with the agreement of the Complainant, refer the matter to the Dean of Students for disposition.
42. The Advisor shall forward the details of the matter, in writing, to the Dean of Students, who shall meet with the Respondent.
43. In disposing of the matter, the Dean of Students shall seek a response, which is instructive for the Respondent and which is intended to help prevent further problems of behaviour. Responses may include, but are not limited to, the following examples:
 - a) issuing of a verbal or written warning not to repeat the behaviour in question;
 - b) requesting that the Respondent give a verbal or written apology; or
 - c) directing that the Respondent's University computer privileges be suspended, where the complaint concerns abuse of such privileges. This measure may only be implemented if it can be done in such a manner as to not hinder the Student's academic activities.
44. The Dean of Students will maintain a file on the matter and will provide a written summary of the outcome to the Advisor who will, in turn, inform the Complainant.

Section VII: Procedures for Adjudicating Formal Complaints Against Students

Formal Complaints

45. Formal complaints made by Students against other Students shall be adjudicated by a Hearing Panel consisting only of students. Formal complaints made by any Member who is not a Student against a Student shall be adjudicated by a Hearing Panel consisting of students, faculty and/or administrative and support staff.

The Secretary

46. A Secretary of the Hearing and Appeal Panels, who shall form part of the Office of Student Tribunals, shall be designated by the Vice-President, Institutional Relations and Secretary-General. The Office of Student Tribunals shall be responsible for the administrative functioning of the Hearing Panels and shall maintain the confidential files and recordings of proceedings of the Hearing and Appeal Panels.

Structure of Hearing Panels

47. Where a formal complaint is made by a Student against another Student, the Secretary shall select a Hearing Panel composed of three (3) graduate or undergraduate students drawn from the Student Tribunal Pool and one (1) non-voting chair.
48. In all other cases, the Secretary shall select a Hearing Panel composed of:
 - a) one (1) non-voting chair; and
 - b) two (2) undergraduate or graduate students drawn from the Student Tribunal Pool;
 - c) one (1) faculty member drawn from the Faculty Tribunal Pool if the complainant is a faculty member; or one (1) member of the administrative or support staff drawn from the Administrative and Support Staff Tribunal Pool if the complainant is a member of the administrative or support staff. If the Complainant is the University (as per article 22), a member of the senior administration or the Security Department, the member shall be drawn from the Faculty Tribunal Pool.

Initiating a Formal Complaint

49. A Complainant may opt to proceed directly to a formal complaint at the outset or after an attempt at informal conflict resolution has been unsuccessful. No statements, documents or information brought forward in the course of an attempt at informal conflict resolution may be used or referred to should a formal complaint be initiated and no reference may be made to the fact that informal conflict resolution was attempted.
50. In the event that a formal complaint proceeds, the following provisions shall apply.
51. The Advisor shall provide the Complainant with a copy of this Code and shall inform the Complainant of the following:
 - a) the required format for submitting the complaint, which must be made in writing, signed and dated and must identify the Complainant and the Respondent and the precise nature of the complaint, including the relevant provision(s) of the Code;
 - b) the procedures which shall be followed by a Hearing Panel;
 - c) the right of the Complainant and the Respondent to consult any person in the preparation of his/her case, and to be accompanied or represented before a Hearing Panel by any Member. If the Complainant is a Student, he/she also has the option of obtaining a student advocate through the services of Advocacy and Support Services or a student advocacy service offered by a student association; and
 - d) the right of appeal.
52. Upon receipt of the written complaint, the Advisor shall immediately notify the Respondent. The Respondent shall be provided with a copy of the Code, a copy of the complaint together with the information detailed in article 51b), c) and d).
53. Concurrent with the notification sent to the Respondent, the Advisor shall notify the Secretary who shall convene a Hearing Panel to hear the matter. Thereafter, the Secretary shall be responsible for all communications with the Complainant and the Respondent.
54. A Hearing Panel shall be convened as soon as possible after receipt of the notification by the Secretary and normally within twenty (20) Days.
55. Once a hearing date is fixed by the Secretary, the Complainant shall submit any additional documentation substantiating his/her case to the Secretary no later than fifteen (15) Days before the scheduled hearing date. Such documentation shall include any supporting documents and a list of the witnesses that will appear, if any, and written statements, if any, made by witnesses regarding the complaint.
56. The Secretary shall forward the documentation together with a list of the panellists selected for the case to the Respondent no later than ten (10) Days before the scheduled hearing date. The list of panellists shall also be sent to the Complainant.
57. The Respondent shall deposit with the Secretary whatever documentation he/she wishes to present at the hearing and the list of witnesses who shall testify on his/her behalf no later than five (5) Days before the hearing. The Secretary shall immediately and no later than three (3) Days before the hearing forward a copy of the entire file to each member of the Hearing Panel. The Hearing Panel may limit the number of witnesses called by both parties taking into account their relevancy.
58. Either party may object to the participation of a panellist on the grounds of potential bias. A reasoned objection shall be filed, no later than five (5) Days after having received the list of panellists, with the Secretary who shall arrange for an alternate panellist to serve if the Secretary determines that the objection is well founded. If the Secretary feels that the objection is frivolous and the matter cannot be resolved, the issue shall be forwarded to the Chair of the Hearing Panel who shall render a final decision in this regard.
59. A settlement may be agreed to by the parties at any time prior to the hearing. If both parties agree to attempt a settlement, the Advisor shall convene and facilitate a meeting between them. The process is entirely voluntary but once a settlement is reached, it is binding. The Advisor shall monitor the terms of the settlement and if either party defaults on the settlement, the Advisor shall inform the other party, who may then decide to resume the formal procedure. No settlement may be imposed by either party without the full agreement of the other.

The Hearing

60. The Hearing Panel shall establish its own rules of procedure. Minimally, these rules shall provide for opening statements by the parties, the presentation of evidence and witnesses, the right of cross examination, questioning by members of the Hearing Panel, representations with respect to desired sanctions and closing statements. Hearings shall be recorded, and the recording kept as part of the permanent record of proceedings for a period of not less than five (5) years.
61. The role of the Chair shall be to preside over the proceedings, keep order and ensure fairness. The Chair shall preside over the deliberations of the Hearing Panel but shall not vote. Decisions shall be made by majority vote. The deliberations of the Hearing Panel shall only be attended by the Chair, the Secretary and the panellists.
62. The hearing shall be closed and confidential unless both parties have consented in writing to the attendance of other Members.
63. If the Respondent fails, without reasonable excuse, to attend the hearing, the hearing may proceed in his/her absence or, at the Chair's discretion, the start of the hearing may be postponed. If the hearing proceeds in the Respondent's absence, all rights contingent on the Respondent's presence, with the exception of the right to have an advocate present to plead for postponement, are forfeited. In such a case, a Respondent's right of appeal is limited to a consideration of the reasonableness of his/her excuse for not appearing. If an Appeals Panel finds that the excuse is reasonable, it shall order a new hearing by a new Hearing Panel with the Respondent present. The decision of the new hearing is appealable as if it were a first hearing.
64. The Hearing Panel shall provide a signed, dated and reasoned decision. The standard of proof to be relied upon by the Hearing Panel shall be one of a "preponderance of evidence." A "preponderance of evidence" standard means that the Complainant must establish that his/her version of the facts is significantly more probable. This standard is less rigorous than the standard of "beyond a reasonable doubt" required under criminal law.

Sanctions

65. The Hearing Panel may impose one or more of the following sanctions:
 - a) a written reprimand;
 - b) conditions (the Hearing Panel does not, however, have the authority to bar a student from any academic activity);
 - c) payment as compensation for damage or loss of property or to otherwise rectify a situation which the Respondent created or helped to create;
 - d) specified community service at the University of up to ten (10) hours per week for a specified period of time not exceeding a total number of sixty (60) hours;
 - e) a fine not exceeding \$500 when the Hearing Panel deems that other sanctions are not appropriate or practical;
 - f) subject to confirmation by the President, a recommendation of Suspension;
 - g) subject to confirmation by the President, a recommendation of Expulsion.
66. All monetary sanctions shall be payable within twenty (20) Days of the date of transmission of the Hearing Panel's decision. The execution of any non-monetary sanction imposed by the Hearing Panel shall not be suspended by an appeal.
67. The decision of the Hearing Panel shall normally be rendered within ten (10) Days of the hearing and shall be communicated in writing to both parties and the Advisor together with notice as to the appeal process provided for under this Code.
68. The administration and monitoring of the sanction(s) imposed shall be the responsibility of the Dean of Students. Failure to pay any monetary sanction imposed within the delay prescribed in article 66 shall result in the amount being added to the Respondent's student account. Should the Respondent fail to comply with any non-monetary sanction, the Dean of Students shall, in writing, convene him/her to an interview and inform the Respondent of his/her right to be accompanied by a student advocate from Advocacy and Support Services or from a student advocacy service offered by a student association or any other Member. During the interview, the Respondent shall have the opportunity to review the evidence related to the alleged violation of the sanction(s) and to provide the Dean of Students with his/her explanation.
69. Following the interview, the Dean of Students may recommend to the President that the Respondent:
 - a) not be permitted to reregister until such time as he/she has fully complied with the sanction(s) imposed;
 - b) be Suspended, or given an additional Suspension if the original sanction was a Suspension;
 - c) be Expelled if the Respondent has failed to respect the sanction imposed more than twice;
 - d) have his/her diploma withheld until such time as he/she has fully complied with the sanction(s) imposed.
70. If the Respondent fails, without reasonable excuse, to attend the interview, the Dean of Students shall review the evidence related to the alleged violation of the sanction(s) and, as the case may be, make a recommendation to the President.

Appeals

71. A party who wishes to appeal a decision or sanction of the Hearing Panel, or both, shall apply in writing to the Secretary for the authorization to lodge an appeal. Such request for authorization to appeal shall be submitted to the Secretary no later than fifteen (15) Days after the date of transmission to the parties of the decision of the Hearing Panel.
72. Any request for authorization to appeal may be based only on the following grounds:
 - a) the discovery of new evidence following the rendering of the decision of the Hearing Panel;
 - b) the presence of serious and prejudicial procedural defects during the hearing process; or
 - c) the decision of the Hearing Panel is patently unreasonable.
73. The request for authorization to appeal shall state in clear and precise terms the grounds on which the appeal is based. Upon receipt of the request for authorization to appeal, the Secretary shall provide the other party with a copy.
74. In his/her request for authorization to appeal, an appealing party ("the Appellant") subject to a sanction may ask the Appeals Panel to suspend the execution of the sanction until a final decision has been rendered by the Appeals Panel.
75. The other party ("Respondent on Appeal") shall submit a concise written reply to the Appellant's request for authorization to appeal and the grounds invoked within five (5) Days of his/her receipt. This statement shall identify the Respondent on Appeal's position on each ground of appeal.
76. All parties to the appeal shall have access to the audiotape recordings for the purpose of preparing their statements.
77. An Appeals Panel shall be convened as soon as possible after receipt of the request by the Secretary and normally within fifteen (15) Days.
78. The Secretary shall select an Appeals Panel composed of:
 - a) one (1) non-voting chair;
 - b) two (2) graduate or undergraduate students drawn from Student Tribunal Pool;
 - c) two (2) faculty members drawn from the Faculty Tribunal Pool;
 - d) one (1) member of the administrative or support staff drawn from the Administrative and Support Staff Tribunal Pool.
79. Notwithstanding article 78 above, if the original Complainant (whether the Appellant or not) is a member of the administrative and support staff, the Appeals Panel shall be composed of two (2) members of the administrative or support staff drawn from the Administrative and Support Staff Tribunal Pool and one (1) faculty member drawn from the Faculty Tribunal Pool. If the Appellant is the University (as per article 22), a member of the senior administration or the Security Department, the Appeals Panel shall be composed of two (2) faculty members drawn from the Faculty Tribunal Pool and one (1) member of the administrative or support staff drawn from the Administrative and Support Staff Tribunal Pool.
80. In no case shall a member of the Appeals Panel also have been a member of the Hearing Panel which conducted the original hearing.
81. The Appeals Panel shall decide whether an appeal shall be heard, having regard to the circumstances of each case.
82. The Appeals Panel shall normally render its decision with respect to the request for authorization, and, as the case may be, the suspension of the execution of any sanction, based upon the written record only, within five (5) Days of its consideration of the request. The Appeals Panel shall be provided with the complete file of the Hearing Panel.

83. The Appeals Panel shall render its decision with respect to the request for authorization in writing, with brief reasons supporting its decision.
84. If the authorization to appeal is granted, it shall normally be heard within fifteen (15) Days of the decision to authorize the appeal. Notification of such decision to authorize the appeal shall be sent to both parties.
85. During the hearing of the appeal, the Appellant and the Respondent on Appeal shall be allowed to make oral representations but shall not be allowed to bring witnesses or to produce new evidence. The decision of the Appeals Panel on the appeal shall only be based upon the representations made by the parties, the decision of the Hearing Panel, the written record, the complete file of the Hearing Panel and the audiotape recordings, as the case may be.
86. The Appeals Panel has the authority to confirm, reverse or modify the decision being appealed. Furthermore, should the appeal be based on the production of new evidence, the Appeals Panel may order a new hearing of the complaint by a new Hearing Panel.
87. The decision of the Appeals Panel shall be signed, dated and reasoned and shall be sent to both parties and the Advisor.
88. The decision of the Appeals Panel shall be final.
89. In extraordinary circumstances where he/she determines that a Hearing Panel or Appeals Panel has acted outside of its jurisdiction as provided for in the Code, the Vice-President, Institutional Relations and Secretary-General may set aside a Hearing Panel or Appeals Panel decision and order that a new Hearing Panel or Appeals Panel, as the case may be, re-hear the matter.

Files of Formal Complaints against Students

90. The Advisor shall maintain a file of all formal complaints processed. The file shall include the written complaint, the decision of the Hearing Panel and the decision of the Appeals Panel, if any. If a settlement is reached prior to a hearing, the general substance of the settlement shall be included in the file. If the complaint is withdrawn at any stage of the formal process, a notation to that effect shall be recorded.

Section VIII: Procedures for Responding to Formal Complaints Made Against Faculty, Administrative or Support Staff Members or Members of the Administration

General Rules

91. The application of the present Section to a Respondent who is unionized or a member of an employee association is subject to the provisions of his/her collective or employee agreement and to the provisions of articles 9, 10 and 11 of the Code.
92. In all cases governed by the present Section, the Advisor shall invite the Complainant to consider an informal resolution and shall advise him/her of their right to consult their respective union or association.
93. The Advisor shall terminate any attempt at informal resolution or formal resolution should either party initiate a process such as, but not limited to, a grievance or other formal internal procedure, or any external procedure such as a complaint or action before a commission, board or tribunal.
94. The absence or non-availability of the Complainant is a factor in the decision of the Advisor and/or the University official empowered to continue any procedures set out in the Code but is not decisive.

Informal resolution

95. A Member who has a concern regarding the behaviour of a faculty, administrative or support staff member, or a member of the administration is strongly encouraged to consult the Advisor and seek a remedy through one or more of the informal dispute resolution procedures described in articles Section VI of the Code.
96. In order to facilitate the informal resolution of the complaint, a Member who belongs to a collective or employee association may agree to suspend any applicable delays provided that all parties (the Member, the University, the union and/or the association) have so agreed in writing.
97. A Member who chooses not to advise his/her union or employee association of the matter should consult the Advisor concerning the possible consequences of such a decision.
98. Attempts at informal resolution facilitated by the Advisor does not constitute a formal University proceeding. Until a formal process is undertaken, no notification shall be deemed to have been made to the University of any complaint or procedure involving a Member.

Initiating a Formal Complaint against a Faculty, Administrative or Support Staff Member or against a Member of the Administration

99. To the extent permitted by the Respondent's collective or employee agreement and relevant University policies and with the agreement of the Respondent's union or employee association on a case by case basis, the following procedure shall be considered the formal investigation under the Respondent's collective or employee agreement.
100. A Member who wishes to file a formal complaint against faculty, administrative or support staff members or against members of the administration shall contact the Advisor.
101. The Advisor shall provide the Complainant with a copy of the Code and shall inform him/her of the following:
 - a) the required format for submitting the complaint, which must be made in writing, signed and dated and must identify the Complainant and the Respondent and the precise nature of the Complaint, including the provision(s) of the Code under which the complaint is being filed;
 - b) the right of the complainant to consult any person in the preparation of his/her complaint, and to be accompanied or represented by any Member during the process of resolution. If the Complainant is a Student, he/she may opt to be accompanied by a student advocate from Advocacy and Support Services or a student advocacy service offered by a student association. If the Complainant is a member of a union or an employee association, he/she may opt to be accompanied by a union or association representative.

102. If the Respondent is a member of a union or association, the Advisor shall inform the Complainant of any delays regarding the imposition of a disciplinary measure which may be set out in the Respondent's collective or employee agreement. The Advisor shall, in particular, advise the Complainant of the delay of ninety (90) Days since the last incident in matters of psychological harassment complaints, as set out in the Quebec Labour Standards Act.
103. Upon receiving a formal complaint, the Advisor shall transmit the complaint to the Authority to whom the complaint must be submitted under the terms of the Respondent's collective or employee agreement and the relevant University policy, with a copy to the Respondent's union or association along with all the relevant information and documentation.
104. In an egregious case, in which the safety or well-being of a Member, or of a group of Members, or of the University as a whole, is at risk, the Authority may take such temporary measures permitted under the collective or employee agreement, relevant University policy and the law, as he/she deems necessary.

Powers and Duties of the Authority

105. The Authority shall inform the Respondent of his/her right to consult any person in the preparation of his/her case, and to be accompanied or represented by any Member during the process of resolution. If the Respondent is a member of a union or an employee association, he/she may be accompanied by a union or association representative.
106. The Authority shall then take the necessary steps to resolve the matter in such a manner as to respect the principles of natural justice and the procedures of any collective or employee agreement or University policy, which may apply.
107. More specifically, the Authority may:
 - a) meet with the Complainant and the Respondent on an individual basis;
 - b) have access to all official files and information as are required, the whole subject to the applicable legislation;
 - c) meet any individual who might, in his/her opinion, provide information relevant to the complaint;
 - d) consult any University officer (representatives of the Department of Human Resources, the Office of the General Counsel, etc.) or outside counsellors as may be required;
 - e) refer the matter to be investigated internally or externally.

Harassment Complaints

108. The formal investigation of a complaint of harassment, including psychological harassment, may be submitted, with the agreement of the parties (including the Respondent's union or association), to an internal assessor as provided for in the relevant collective or employee agreements, University policies or externally to one of the Investigators ("the Investigator") chosen from an Investigator Pool agreed to by the University and the unions and employee association.
109. All information, whether in writing or in any other form, obtained by the Authority and/or the Investigator in the performance of his/her duties in relation to any complaint and harassment shall be strictly confidential except as provided for by law.
110. In cases where an Investigator is used, he/she must complete his/her mandate within a reasonable delay and in all cases within forty (40) Days from the appointment of the Investigator, unless the parties have agreed otherwise in writing. Upon the completion of his/her investigation, the Investigator shall send the written report to the Authority and to the Advisor. A summary of the report, prepared by the Investigator without any mention of nominative information shall be provided to the Respondent and his/her union or association.
111. Upon the completion of the investigation, the Authority may dismiss the complaint, impose or recommend the imposition of a disciplinary measure or take any other action permitted by the relevant collective or employee agreement or University policy.
112. When the matter has been decided by the Authority, the Authority shall notify the Complainant and the Advisor of the general substance of the decision and any action that was taken as a result of the complaint.
113. When the decision or remedial action taken by the Authority is not a disciplinary action as defined by the relevant collective or employee agreement or University Policy, as the case may be, the Authority or the Associate Vice-President, Human Resources, as appropriate, shall monitor compliance. Once satisfied that compliance has been effected, the Authority shall so inform the Complainant and the Advisor.
114. If disciplinary action is taken and subsequently overturned by a higher authority or by the grievance and arbitration procedures, the Complainant and Advisor shall be notified.

Files of Formal Complaints against Faculty, Administrative and Support Staff Members or Members of the Administration

115. The Advisor shall maintain a file of formal complaints received against faculty, administrative or support staff members or members of the administration which shall summarize the substance of the consultation with the Complainant, the record of resolution as supplied by the Authority and information that a sanction has been overturned through grievance or arbitration, if this is the case.

Section IX: Urgent Situations

Reporting and Responding to Urgent Situations

116. Members who are faced with an urgent situation involving threatening or violent conduct, where there is reasonable cause to believe that the safety or security of persons may be threatened, shall immediately contact the Security Department. The Security Department shall take whatever reasonable action is necessary to secure the safety of persons, and shall immediately alert the Advisor. In such a case, the Advisor shall be guided by the *Protocol on the Coordination of Urgent Cases of Threatening or Violent Conduct* ("the Protocol") (see concordia.ca/vpirsg/documents/policies/BD-3_Protocol.pdf).
117. Members shall immediately report to the Advisor any conduct which they have reasonable cause to believe potentially threatens the safety or security of persons. The Advisor shall assess the situation as specified in the Protocol, consult experts as necessary, and make recommendations as to any further action appropriate in the circumstances.
118. Any Member who is called to a Team meeting under the Protocol shall respond promptly.

Disciplinary Officers

119. For the purposes of the Code, the following individuals are hereby constituted as "Disciplinary Officers" and shall have the powers, duties and obligations conferred upon them in the present Code as well as any powers reasonably incident thereto:
- a) the President and Vice-Chancellor;
 - b) the Vice-Presidents;
 - c) the Academic Deans including the Dean of the School of Extended Learning.

Temporary Exclusion of a Student by a Disciplinary Officer

120. A Disciplinary Officer may require any Student to immediately leave and remain away from the University premises or a part thereof, for a period not exceeding two (2) Days, if to his/her personal knowledge or based upon reliable information, the Disciplinary Officer has reasonable grounds to believe that the Student's continued presence at the University:
- a) is detrimental to any Member's pursuit of his/her work, studies and other activities related to University life in a safe and civil environment; or
 - b) constitutes an immediate threat to the safety or security of others.
121. No Student shall be barred from taking any examination or submitting any academic assignment as a result of this Section but the Disciplinary Officer may make special arrangements as to the time and place for the completion and/or submission of any academic assignment or writing of any exam.
122. A Disciplinary Officer shall immediately advise the Registrar, the Secretary, the Dean of Students, the relevant Academic Dean(s), the Advisor and the Security Department of the temporary exclusion of a Student under this Section.
123. Any temporary exclusion ordered under this Section shall not be deemed to be in lieu of other proceedings under the Code if the conduct for which exclusion is ordered also constitutes an offence under articles 28 and 29 of the Code.

Suspension of a Student by the President

124. The President may Suspend a student, exclude the student from any University premises and take any other steps that may be appropriate where:
- a) the Student presents a clear and present danger to the safety of persons or to the activities of the University as a whole or any of its Members or groups of Members; or
 - b) the Student has, on one or more occasions, presented a clear danger to the safety of persons or to the activities of the University as a whole or of any of its Members or groups of Members and whose identity or action has only recently been identified; or
 - c) the Student's actions are of such a serious nature that they create an intimidating and hostile environment for work or study or constitute a serious threat to the ability of the University and its Members to carry out the University's functions.
125. In such a case, the President shall provide the Student with a written suspension notice with a copy to the Registrar, the Secretary, the Dean of Students, the relevant Academic Dean(s), the Advisor, and the Security Department. The President shall inform the Student of his/her right to consult a student advocate from Advocacy and Support Services or a student advocacy service offered by a student association and shall also provide the Student with a copy of any supporting information and a copy of the Code.
126. In such a case, the President shall immediately lay a complaint against the Student under Section V of the Code. The regular delays of the Code shall not apply and a hearing into the complaint shall be held within ten (10) Days of the suspension order. The President may designate another Member to represent him/her at the hearing. The Hearing Panel shall render its decision and inform the parties within three (3) Days of the hearing. If no hearing into the complaint has been held within fifteen (15) Days of the suspension order for reasons other than the Student's inability to attend the hearing as outlined below, the suspension order shall be lifted until such time as the Hearing Panel may re-impose the suspension.
127. Should the suspended Student be unable to attend the hearing within the prescribed delay, he/she shall notify the Secretary as soon as he/she is able to attend a hearing. Upon such notification, the Secretary shall convene a hearing as soon as possible.
128. In the event that the Hearing Panel determines that the original complaint was unfounded, that decision shall not invalidate the President's prior action. However, every effort shall be made to remedy any academic disadvantage that the student may have experienced as a consequence of the Suspension.
129. Upon the lifting of the Suspension, the Secretary shall notify the Registrar, the Dean of Students, the relevant Academic Dean(s), the Advisor and the Security Department.

Temporary Exclusion of a Member of the Faculty or Administrative and Support Staff

130. Where a member of the faculty or administrative and support staff presents a clear and present danger to the safety or security of persons or to the activities of the University as a whole or of any of its individual Members, the matter shall be dealt with according to the provisions of the relevant collective or employee agreement or University Policy.
131. A Member against whom such action is taken may seek recourse through the grievance procedures of the relevant collective or employee agreement or the grievance procedures contained in University Policy, where they exist.

Section X: Miscellaneous

Confidential Nature of Files

132. The Advisor shall maintain suitable records of complaints and their disposition which shall be accessible only to the staff of the Office of Rights and Responsibilities or as required by law. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Delays

133. In the calculation of any delay set out in the Code, the months of July and August shall not be taken into account. However, in the case of a hearing before a Hearing Panel or an Appeals Panel that commenced before July 1, the regular delays set out in the Code shall apply.

Notices

134. Any written notice to any person shall be sent by courier, email or fax to the last address or fax number provided by the person to the University and shall be deemed to be received one (1) Day after delivery.

Language

135. Any party or witness participating in a hearing before a Hearing Panel or an Appeals Panel may make their presentation in either English or French.

The Vice-President, Institutional Relations and Secretary-General

136. The overall responsibility for the implementation and recommended amendments to the Code shall rest with the Vice-President, Institutional Relations and Secretary-General.
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17.40

OMBUDS OFFICE

Ombudsperson
KRISTEN ROBILLARD

Location

Sir George Williams Campus
Ombuds Office
GM Building, Room: 1120
514-848-2424, ext. 8658

TERMS OF REFERENCE OF THE OMBUDS OFFICE

Scope

1. The Ombuds Office shall be independent of all existing administrative structures of the University.
2. For the purposes of these Terms of Reference:
“Member” means faculty members, employees, administrative and support staff, postdoctoral fellows, members of the administration, students, student applicants, interns, academic visitors, stagiaires or researchers including but not limited to exchange students and visiting students.
3. The Ombudsperson shall provide an impartial and confidential service to Members who have been unable to resolve their concerns about the application of any policy, rule or procedure.
4. The Ombudsperson may not inquire into the application or interpretation of a collective or employee agreement nor into the alleged violation of the duty of fair representation against a certified union.
5. The Ombudsperson shall have no actual authority to impose remedies or sanctions, or to enforce any policy, rule or procedure. However, he/she may make any recommendations that he/she deems appropriate with regard to resolving complaints or improving policies, rules or procedures.

Functions of the Ombuds Office

6. Specifically, the Ombudsperson shall:
 - a. actively promote these Terms of Reference and the services offered;
 - b. inform Members about existing policies, rules and procedures and advise them as to the appropriate channel of redress for any concern or complaint they may have;
 - c. assist Members to resolve complaints informally and quickly;
 - d. at his/her discretion, conduct an independent and objective inquiry into complaints when normal channels of recourse have been exhausted;
 - e. at his/her discretion, conduct an independent and objective inquiry into the application of any policy, rule or procedure of the University;
 - f. explain decisions taken by University authorities when complaints are not substantiated;
 - g. at his/her discretion, recommend solutions to help resolve complaints;
 - h. bring to the attention of University authorities any policies, rules or procedures which appear unclear or inequitable or which might jeopardize the rights or freedoms of any Member. The Ombudsperson may suggest changes to the existing policies, rules or procedures or offer advice on the development of new policies, rules or procedures.

Special Concerns of the Ombuds Office

7. In dealing with complaints, the Ombudsperson shall be concerned that all Members are dealt with and deal with others fairly and more specifically that:
 - a. decisions affecting Members are made with reasonable promptness;
 - b. procedures used to reach decisions are adequate and the criteria and rules upon which such decisions are based are appropriate;
 - c. procedures and criteria used in making decisions are clearly communicated to those affected.

Complaints

8. In dealing with complaints, the Ombudsperson shall act in an impartial fashion, acting neither as an advocate for the Member making a complaint (“the Applicant”) nor as a defender of the University but rather he/she shall seek to promote procedural fairness and a reasonable outcome. In so doing, he/she shall endeavour to maintain harmonious relations with all Members using tact, diplomacy and sensitivity.
9. The Ombudsperson shall have prompt access to such University records, reports or documents as are required to fulfill his/her functions. Requests for such access shall receive priority from all Members.

10. A complaint should be brought to the attention of the Ombudsperson within six (6) months of the Applicant becoming aware of the situation giving rise to the complaint. This period may be extended at the discretion of the Ombudsperson.
11. If the Ombudsperson decides to inquire into a matter, he/she shall make every effort to consult the relevant parties and give such parties the opportunity to reply, should they so wish.
12. Upon the conclusion of an inquiry, the Ombudsperson shall advise all parties to a complaint of his/her findings and any recommendations that he/she has formulated.
13. In addition, the Ombudsperson may bring his/her findings to the attention of the University authorities and make whatever recommendations he/she deems appropriate and to whomever within the University he/she feels should receive them. Such recommendations may bear either on the actions or decision of an individual or a group, or on the policies, rules and procedures which gave rise to them. If, upon receipt of such findings or recommendations, a University authority proceeds to disciplinary action in order to resolve the matter, the procedure of any relevant University policy, collective or employee agreement shall be followed.
14. The Ombudsperson may refuse to take up any case where he/she judges his/her intervention would be inappropriate and may withdraw from a case if continued involvement is ill-advised. In such cases, the Ombudsperson shall inform the Applicant as to the appropriate channel of redress, if applicable.
15. If the Ombudsperson refuses to take up a case or withdraws from a case, he/she shall, upon request, provide the Applicant with a written statement of the reason.
16. The Ombudsperson shall not inquire into any matter that is before a court of law or is pending at or before any administrative tribunal outside the University. In addition, upon being informed that a legal claim or that a notice of a potential legal claim has been received by the University, the Ombudsperson shall immediately withdraw from a case and shall cease any communication with the Applicant.
17. Under no circumstances shall the mere fact of bringing a complaint to the attention of the Ombudsperson constitute a formal notification, for legal purposes, to the University.
18. The Ombudsperson shall avoid involvement in cases where there may be a conflict of interest.

Confidentiality and Protection from Reprisals

19. Should the pursuit of any inquiry necessitate the disclosure of details that identify an Applicant, the Applicant shall be informed. Any disclosure shall be limited to those who have a need to know.
20. Should an Applicant decide to withdraw an application in order to protect his/her anonymity, the Ombudsperson shall respect this decision.
21. The Ombudsperson shall respect the confidentiality of any confidential information or materials to which he/she has access.
22. Should the Ombudsperson consider that the response to his/her recommendation has been unsatisfactory, he/she shall be entitled to make the recommendation public, provided always that, subject to Article 19, the confidentiality of the Applicant is respected.
23. Notwithstanding articles 19-22, confidentiality rights are subject to disclosure required by law and specifically situations outlined in the *Policy on the Emergency Release of Personal Information* (VPERSG-5).
24. No Member who seeks the services of, files a complaint with, or cooperates in any manner with the Ombudsperson, shall be subject to any reprisals for so doing. The procedure set out in the relevant University policy or collective or employee agreement shall be followed in cases of alleged reprisals.

Files

25. The Ombudsperson shall maintain suitable records of complaints, findings and recommendations which shall be accessible only to the staff of the Ombuds Office or as required by law. Such files shall be destroyed according to a retention schedule determined in accordance with provincial legislation.

Appointment of Ombudsperson

26. The Ombudsperson shall be appointed by the Board of Governors ("the Board") upon the recommendation of a representative advisory committee struck for this purpose by the Board. The Committee shall be composed of representatives of the University constituencies, including at least one (1) undergraduate and one (1) graduate student and shall be chaired by Vice-President, Institutional Relations and Secretary-General.
27. The Vice-President, Institutional Relations and Secretary-General shall act as the link between the Board and the Ombudsperson for administrative purposes.
28. The appointment shall be made for an initial term of two years, renewable for further terms of five years. During the fourth year of each such term, the Board shall appoint an appraisal committee, chaired by the Vice-President, Institutional Relations and Secretary-General, and composed of representatives of the University constituencies, including at least one (1) undergraduate and one (1) graduate student which shall:
 - a. review the operations of the Office;
 - b. make recommendations with respect to the Office;
 - c. make a recommendation with respect to the renewal of the Ombudsperson.
 This review shall include, but shall not be limited to, consultations with the University community as well as an external appraisal.
29. The Ombudsperson shall submit an annual report to the Board by November 1 of each year covering the previous academic year. The report shall detail activities of the Ombuds Office, including statistics on the concerns and complaints received, and shall make recommendations, as necessary. The Vice-President, Institutional Relations and Secretary-General shall ensure that the appropriate University authorities consider and respond to the recommendations contained in the report.
30. The annual report shall be published in the University's newspaper and submitted, for information purposes, to the Senate.

Complaints Relating to the Operations of the Ombuds Office

31. If a Member considers that the Ombudsperson has committed a procedural or substantive violation of these Terms of Reference, with respect to any matter to which the Member has been a party, he/she may submit a written complaint, detailing the alleged violation, to the Vice-President, Institutional Relations and Secretary-General. The Vice-President, Institutional Relations and Secretary-General shall investigate the complaint and inform the Member of the results of the investigation.
 32. If the Member is not satisfied with the response of the Vice-President, Institutional Relations and Secretary-General, he/she may request, in writing, within fifteen (15) working days of receiving the response, that the Appeals Committee of the Board review the complaint against the Ombudsperson.
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Student Life and Student Services

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Section 18

18

STUDENT LIFE AND STUDENT SERVICES

Associate Vice-President, Student and Enrolment Services
BRADLEY TUCKER

Director of Counselling and Development
HOWARD MAGONET

Director of Health Services
MELANIE DREW

Director of Residence Life
D'ARCY RYAN

Director of Financial Aid and Awards
STEPHANIE SARIK

Director of Advocacy and Support Services
BRIGITTE ST-LAURENT

Dean of Students
ANDREW WOODALL

Director of Recreation and Athletics
KATIE SHEAHAN

18.1 STUDENT LIFE AND STUDENT SERVICES

18.1.1 Student Services' Mission Statement

The mission of Concordia University's Student Services is to provide a network of expertise, resources, and programs to facilitate and enhance students' academic success and their personal development. We advocate for students, support diversity, assist in the development of agency, and encourage a strong sense of community. We are committed to adapting our practices to meet current and evolving needs of the University community, in partnership with students, faculty, and staff."

Approved by Concordia Council on Student Life • November 2001

18.1.2 Concordia Council on Student Life (CCSL)

The Council is the highest non-academic advisory committee in the University making recommendations regarding the quality of student life. The Council derives its authority from the University Board of Governors, and reports to the Board through the President. The Council, a parity body responsible for Student Services programs, policies and budgets, studies the range of student life on both campuses. It is composed of 10 students, two faculty members, and eight members of the Student Services staff. The Dean of Students chairs the Council. Its meetings are open to all members of the University community.

18.2 DEAN OF STUDENTS

Loyola Campus
Administration Building, Room: AD 121
514-848-2424, ext. 4239

Sir George Williams Campus
Hall Building, Room: H 637
514-848-2424, ext. 3517

The Dean of Students Office exists to support and promote all aspects of para-academic life on campus. It is the principal resource at the University for the interpretation and regulation of policies and procedures as these apply to the non-academic aspects of student life. Student associations and groups, of whatever nature, are one of the primary means by which students can relate meaningfully to the institution. By providing liaison with and support to student groups and their governing bodies, the Dean of

Students encourages students in the conduct of their own collective affairs, and facilitates the growth of student associations and the active involvement in them by students. The Dean of Students supports student engagement in various ways, including the LIVE Centre, Alternative Spring Break, leadership development, the co-curricular record, and access to special funding for projects. It also oversees awards for engagement in the Concordia community.

deanofstudents.concordia.ca

18.2.1 Social, Political and Cultural Activities

A wide variety of social, political, and cultural events is presented regularly by various student organizations and departments. There is a students' cafeteria and lounge facilities on each campus, and there is a student pub on the Sir George Williams Campus.

18.2.2 Concordia University Student Parent Centre (CUSP)

The Concordia University Student Parent Centre (CUSP), although not offering child care, provides support and services to parents studying at Concordia. It can be found at:

Sir George Williams Campus
TD Building, Room: 24
514-848-2424, ext. 2431
cusp.concordia.ca

18.2.3 Multi-Faith Chaplaincy

Multi-Faith Chaplaincy is a service department that nurtures faith, spirituality, and social responsibility. It is respectful of all faiths and spiritual paths, and offers workshops, discussion groups, meditations, religious services, retreats, volunteer and outreach opportunities and social activities. Students can meet with chaplains of various religious traditions for personal conversations, particularly concerning issues of faith, spirituality, values, and ethics, or in times of crisis and transition.

Multi-Faith Chaplaincy also seeks to foster understanding between faiths and hosts events throughout the year to engage the Concordia community in inter-faith encounters, such as multi-faith fairs or the annual Graduation Celebration of Many Faiths. It has a lounge in its downtown offices which is a welcoming place to study, meet others, and have stimulating conversations.

Loyola Campus
Administration Building, Room: AD 130
514-848-2424, ext. 3588

Sir George Williams Campus
Annex Z, Room: First floor and basement level
514-848-2424, ext. 3593

chaplaincy.concordia.ca

18.2.4 Leadership, Initiative and Volunteer Engagement (LIVE) Centre

The LIVE Centre (SGW-H 608) seeks to connect Concordia students with volunteer opportunities on campus, in Montreal and abroad. The Centre offers workshops on a variety of volunteerism-based topics, provides coaching for students to discover their volunteering interests, and works with students to develop leadership opportunities through strategic volunteering.

At the LIVE Centre students are encouraged to:

- Meet with community organizations recruiting volunteers on campus
- Participate in group volunteering events
- Connect with other students and organize their own volunteer initiative

Find out more at: volunteer.concordia.ca

18.3 ADVOCACY AND SUPPORT SERVICES

Advocacy and Support Services offers a wide range of services to assist students in making the most of their opportunities at Concordia. Experienced staff from the Aboriginal Student Resource Centre, International Students Office, Access Centre for Students with Disabilities, and the Student Advocate Program is available to help students achieve their highest potential.

Sir George Williams Campus
Hall Building, Room: H 645
514-848-2424, ext. 3536

supportservices.concordia.ca

18.3.1 Access Centre for Students with Disabilities

Students with visual or hearing impairments, mobility limitations, or learning disabilities may require special services while studying at Concordia. Services include orientation sessions, individual academic support and advising, alternative media transcription, and classroom relocation for mobility-impaired students. Tape recorders, FM personal systems, and personal computers with voice and Braille output are available for on-campus use. All students with disabilities are advised to contact the Access Centre for Students with Disabilities (ACSD) as early as possible for assistance in meeting their special needs. In particular, students using interpreter services, attendant care, or requiring identification letters to be sent to their professors from the Access Centre must contact the office prior to the beginning of classes.

Special Accommodations for Examinations

Students requiring special accommodation for examinations must contact the ACSD at the beginning of each term. All arrangements are contingent upon submission of appropriate documentation. It is the responsibility of the student to submit recent documentation, request exam accommodations, and verify specific exam arrangements with the Access Centre for Students with Disabilities. All accommodations must be exam specific as well as disability specific.

The Policy on Accessibility for Students with Disabilities is available at concordia.ca/vpirsg/documents/policies/VPS-14.pdf.

Sir George Williams Campus
Hall Building, Room: H 580
514-848-2424, ext. 3525

supportservices.concordia.ca/disabilities

18.3.2 International Students Office

The International Students Office is responsible for providing special programs and services to International students.

Services include:

- Information on student-related immigration applications, procedures, and regulations
- The Health Insurance Plan for International Students
- Information on employment regulations: on campus; off campus; post-graduation; and co-op employment
- Advising and support in the area of cultural adaptation and integration
- Orientations, information sessions, workshops, and access to a housing support group
- The ISO Information Bulletin
- Short-term emergency loans

It is essential that International students bring their immigration documents and/or passport (see §19.2 for further details) to the International Students Office as soon as possible.

For details on immigration and documentation requirements, health insurance, and other important information, see §19.

Sir George Williams Campus
Hall Building, Room: H 653
514-848-2424, ext. 3515

supportservices.concordia.ca/iso

18.3.3 Aboriginal Resource Centre

The Aboriginal Resource Centre offers support services and resources to First Nations, Métis, and Inuit students at Concordia. The Centre is a welcoming space where Aboriginal students can meet to plan social activities or just relax between classes. Staff is available to address individual needs and provide support and encouragement for all Aboriginal students at Concordia to continue with their program and achieve their highest potential. The Centre also seeks to increase awareness of Aboriginal cultures among the Concordia community. The Centre has an Elder-in-Residence and a documentation centre that all Concordia students, faculty, and staff can consult. Aboriginal students may access the Centre's programs and services, including a lounge, a computer lab, and photocopy services.

Sir George Williams Campus
Hall Building, Room: H 641
514-848-2424, ext. 7327

supportservices.concordia.ca/nativecentre

18.3.4 Student Advocate Program

The Student Advocate Program offers support services to students who need assistance with academic misconduct interviews, *Academic Code of Conduct* or *Code of Rights and Responsibilities* hearings, or other administrative processes. The Student Advocate Program is a free, confidential service for all Concordia students.

Sir George Williams Campus
Hall Building, Room: H 645
514-848-2424, ext. 3992/3536

supportservices.concordia.ca/studentadvocateprogram

18.4 COUNSELLING AND DEVELOPMENT

The mission of Counselling and Development is to empower students to achieve their personal, academic, and career potential. Counselling and Development's team of professionals provides services to undergraduate students through individual appointments, groups, and workshops. Students benefit from Counselling and Psychological Services, Student Learning Services, Career Services (CAPS), Services for New Students, the Student Success Centre, and the Concordia LIVE Centre. All services are provided by professional staff and are available on both campuses. Confidentiality is assured.

Loyola Campus
Administration Building, Room: AD 103
514-848-2424, ext. 3555

Sir George Williams Campus
Hall Building, Room: H 440
514-848-2424, ext. 3545

Annex EN, Room: 109
514-848-2424, ext. 7345

cdev.concordia.ca

18.4.1 Student Success Centre

The Student Success Centre (SGW-H 481 and LOY-AD 101) offers a wide range of programs and services designed to support student success. No appointment is necessary.

- Student success mentors (upper-year Concordia students) offer personalized support, guidance, and information about university life and services, and strategies for success.
- Referral service connects students to all Concordia services, according to each student's individual needs.
- Resource service provides information about, and access to, many Counselling and Development programs, including workshops, peer assistance programs, and special events.
- Outreach activities provide students in many areas of the University with information and resources to promote success.

Online resources at studentsuccess.concordia.ca

18.4.2 Student Success Resource Centre and Career Resource Centre

The Student Success Resource Centre on the Loyola Campus (AD 103-5)) and the Career Resource Centre on the Sir George Williams Campus (H 440-1) provide a relaxed and comfortable setting where students can access both online and print resources that support the services available at Counselling and Development, including materials and information on:

- Career exploration and job search preparation
 - Study skills and learning strategies
 - Personal development and life management skills
 - Dictionaries, grammar references, writing style manuals, science and math guides
 - Graduate school guides and the application process
 - Practice guides for GRE, TOEFL, MELAB, GMAT, LMAT, and MCAT
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18.4.3 Services for New Students

Services for New Students helps new students make a successful transition to university by providing a welcoming environment and support throughout the first academic year.

- Orientation programs such as Discover Concordia and the Graduate Student Orientation provide new students with the opportunity to meet members of the university community and learn about the vast network of support services and university resources aimed at enhancing student success.
- Start Right provides an orientation to university learning, including practical tips, strategies, and techniques to help students meet the demands of university-level study.

- The Student Success Check-Up Orientation helps students identify their own strengths and possible weaknesses and create a personal action plan for university success.
- First-year experience seminars, student experience seminars, and graduate experience seminars help students develop a solid foundation of skills and knowledge needed to achieve their goals.
- The Program for Leadership and University Success (PLUS) provides new students with positive role models and the ongoing support of a student success mentor. PLUS also encourages all students to become actively involved in the university community and develop leadership skills.
- The Bridge Magazine is a publication specifically for new students. It contains information and advice to help new students get the most out of their first year at Concordia.

Online resources at newstudent.concordia.ca

18.4.4 Counselling and Psychological Services

Counselling and Psychological Services is staffed by licensed psychologists and counsellors who provide support for students by helping them develop coping strategies to manage and overcome a variety of personal and emotional issues. Counselling and Psychological Services offers assistance to students in crisis. These confidential services include:

- Personal Counselling:
 - increase self-esteem and self-awareness
 - develop necessary life skills (such as stress management, effective communication, conflict resolution)
 - work on relationships, loss, sexuality, body image
- Career Counselling:
 - make an informed career decision by engaging in the necessary steps of the career-planning process
 - use career testing to clarify career and educational goals
- Psychological Testing and Assessment:
 - learn more about oneself through psychological testing
 - screen for ADD/ADHD and learning disabilities
- Educational Counselling
- Other Counselling Services:
 - Consultation
 - Group counselling and psycho-educational workshops
 - Outreach and information sharing

Confidentiality is assured.

Online resources at counselling.concordia.ca

18.4.5 Student Learning Services

Student Learning Services offers help to students making the transition to university learning, and to all students who want to improve their learning efficiency.

- Learning assistance is offered by learning and study skills specialists who help students on an individual basis to access and develop academic skills appropriate to their course and discipline.
- Writing assistance on both campuses is offered by peer writing assistants who help individual students of all abilities and at any stage of the writing process to improve their writing, in either English or French, including generating and organizing ideas, overcoming writer's block, and revising and editing.
- Math-based tutoring is offered by peer math assistants who help individual students succeed in basic math and accounting courses and deal with math anxiety.
- EXAMCRAM, free review sessions for basic math courses, are organized during fall and winter final exam periods.
- Drop-in help for basic science courses is offered at the Loyola Campus.
- Study skills workshops are offered free of charge to help students improve their academic skills in reading, writing research papers, making oral presentations, developing problem-solving skills, note-taking, preparing for and taking different types of exams, improving memory and concentration, and managing time.
- Conversation groups and TalkTimes (one-hour small group conversation sessions) are led by peer assistants who help students practise their English speaking skills.
- French conversation groups (Jazz-ons), led by peer assistants fluent in French, help students improve their French conversation skills.
- Strategic Learning (SL) sessions, facilitated by trained student leaders, are offered for certain difficult courses. Study groups, led by students with a strong background in the material, are organized for students in basic Economics and Physics courses.

Online resources at learning.concordia.ca

18.4.6 Career and Placement Services (CAPS)

Career and Placement Services helps students to:

- Connect with employers through job postings, on-campus recruiting, and career fairs
- Explore career options in their field of study at career panel discussions
- Improve their job-hunting techniques:
 - meet with career advisors to improve their resumé and cover letter, prepare for job interviews, and develop a networking strategy

- attend job-search, interview skills and resumé writing workshops
 - research employers and labour-market trends
 - access the CAPS Job Bank
 - Access print and electronic sources through the Career Resource Centre (CRC)
- Online resources at caps.concordia.ca
-

18.5 HEALTH SERVICES

Health Services is an on-campus clinic and health promotion centre. The staff, which includes nurses, physicians, consulting psychiatrists, psychologist, service assistants, and health promotion specialists, work collaboratively to provide students with high-quality, personalized health care and health education.

All services are strictly confidential. Information can only be released with the student's written authorization. This policy applies regardless of whether the information is requested by family members, community physicians, therapists or University officials.

18.5.1 Services

Health Services offers a wide variety of services including:

Clinical Services

- Booked appointments with physicians and nurses for check-ups, non-urgent or chronic issues
- Urgent care for unexpected illness and injury
- Sexual health: STI assessment and treatment, contraception
- Preventive medical care, including immunizations and annual physicals

Health Promotion

- Individualized health behaviour change counselling for smoking cessation, healthy eating, physical activity, body image education, stress management and sleep habits

Mental Health

- Psychiatry, assessment and consultation
- Short-term psychotherapy

For those services that are not offered, such as dental care and eye care, Health Services can provide the names of resources that are located in the vicinity.

How to Use Health Services: Using Health Services is easy. Students may call ahead to make an appointment for predictable issues or concerns such as a physical examination, prescription renewal, or health education. For more urgent health-care needs, students may come into one of the walk-in clinics where patients are seen on a first-come, first-served basis.

18.5.2 Health Insurance

Most of the services offered at Health Services are free of charge, provided students are currently registered and have valid health insurance. For visits with a nurse or health educator, students will be asked to show their Concordia ID card. For physician visits, proof of Quebec Health Insurance plan coverage, coverage from another province, or International Student Insurance is required. If a client of Health Services does not have valid health insurance, he or she will be required to pay for a physician visit. Both Health Services locations can provide students with information pamphlets on how to obtain a valid health card or how to maintain coverage while studying outside their province of origin.

Out-of-Province Students: To retain health coverage while studying at Concordia, out-of-province students must notify their provincial health authority of their status as a student in Quebec. This must be done at the beginning of each academic year. Information on how to do this can be obtained through Health Services or on their website. Unlike clinics in the community, International and out-of-province students are not charged additional fees for their medical care. Students are therefore encouraged to use Health Services for their health-care needs.

18.5.3 Health Promotion

Health Services offers programs and activities in health education, health promotion, and informed health care consumerism. The health promotion specialists, along with other Health Services staff, bring health promotion information to students through outreach events on campus; monthly brown bag lunch-time lectures; classroom presentations; and presentations for student organizations. A calendar of events can be found on the Health Services website. Health Services offers discount prices on condoms and latex gloves.

18.5.4 Loyola Health Services

Loyola Health Services ensures access to health care and health information on the Loyola Campus. The centre is staffed by a nurse who can provide many of the services offered at SGW Health Services. Appointments to visit a physician are available at the Loyola Campus. Appointments can be made for physical examinations and prescription renewals.

18.5.5 Medical Conditions and Academic Responsibilities

If medical problems or concerns are interfering with a student's ability to attend class, complete assignments, or write exams, Health Services staff can work with the student to assess the problem and review ways in which Health Services can be of assistance.

18.5.6 Location and Hours of Operation

Loyola Campus

7141 Sherbrooke St. W., Room: AD 131 (Opening as of January 2013)

Tel.: 514-848-2424, ext. 3575

Fax: 514-848-4533

Office Hours:

Monday to Friday: 9 AM to 5 PM

Closed for lunch between 11:30 AM and 1 PM

Sir George Williams Campus

1550 De Maisonneuve Blvd. W. (GM Building), Room: GM 200

Tel.: 514-848-2424, ext. 3565

Fax: 514-848-2834

Office Hours:

Monday to Friday: 9 AM to 5 PM

**Both offices are wheelchair accessible.*

Website: health.concordia.ca

18.5.7 Residence and Off-Campus Housing

RESIDENCE

Loyola Campus (West End)

There are two residences located on the Loyola Campus — Hingston Hall and the Jesuit Residence.

Hingston Hall is comprised of two four-storey dormitory-style co-ed residences that house 249 first-year full-time undergraduate students. Single and double rooms are available with communal washrooms and kitchenette/lounges on each floor.

Jesuit Residence is a seven-storey dormitory-style, co-ed residence that houses 52 first-year full-time undergraduate students. This residence has single rooms with private bathrooms. There are centrally located kitchenette/lounges.

Sir George Williams Campus (Downtown)

Grey Nuns Residence is a four-storey dormitory-style, co-ed residence that houses 241 full-time first-year undergraduate students. The residence offers single and double rooms. Centrally located on each floor are communal washrooms and kitchenette/lounges.

Students in residence are required to enrol in a meal plan offered by Concordia's food services provider, Chartwells. Information about the meal plan can be obtained directly from Chartwells at 514-848-2424, ext. 7360 or 3641, or through their website at dineoncampus.ca/concordia.

By law, students are required to sign a *Lease in an Educational Institution* as issued by the Régie du logement – Gouvernement du Québec. The lease is for an eight-and-a-half-month period from the third week of August to the first week of May. Exact dates may vary based on the academic calendar.

A first come, first served process is used to make housing assignments for the fall/winter terms. Acceptance to the University does not guarantee admission to residence. A separate application for on-campus housing can be accessed through the student portal once an acceptance is issued by the University.

More information on Residence Life can be obtained by contacting the office at tel.: 514-848-2424, ext. 4755, fax 514-848-3937, or by writing to:

Concordia University – Residence Life
1455 De Maisonneuve Blvd. W., GN I-103
Montreal, Quebec H3G 1M8

OFF-CAMPUS HOUSING

A computerized housing list is made available through the Concordia Student Union (CSU) at hojo.csu.qc.ca.

18.6 FINANCIAL AID AND AWARDS

General Information

The Financial Aid and Awards Office assists students and prospective students in seeking and securing financial assistance to enable them to pursue their scholastic objectives. Student financial assistance is available in various forms, such as government student loans and/or bursaries; University and privately funded scholarship and bursary programs; and on-campus work opportunities through the Work-Study Program.

18.6.1 Gouvernement du Québec Student Loans and Bursaries

Application forms for Quebec Loans and Bursaries are available from the Financial Aid and Awards Office. It is highly recommended that students apply for Quebec Loans and Bursaries online at www.afe.gouv.qc.ca/index.asp a minimum of eight weeks prior to their studies. Each student is responsible for completing his or her application form and forwarding it directly to the government. Once a student's aid is calculated, he or she will receive a formal calculation sheet indicating the amount of aid he or she will be entitled to receive.

It is important to note that the Loans and Bursaries Program is based on the principle that the student and, in some cases, his or her parents, sponsor or spouse, must contribute toward the cost of the student's education according to their respective means. In addition, the Government Loan and Bursary programs serve as a supplement to a student's own resources. Therefore, a student should not expect that all of his/her expenses will be covered through government aid.

Financial assistance is initially granted in the form of a loan which a student must pay back at the end of his or her full-time studies. If a student is entitled to more than the maximum loan, he or she may receive additional assistance in the form of a bursary, which does not have to be paid back.

Eligibility

Students are eligible to be considered for government assistance if they meet the following conditions:

1) Canadian citizen or permanent resident; 2) resident of Quebec for one year (the last 12 consecutive months) before pursuing full-time studies; 3) must be enrolled full-time. Full-time credit load for undergraduate students is defined as per Concordia University Calendar (§16.1.2). For graduate students (master's and PhD), status is defined by the Admissions Office of the School of Graduate Studies. Graduate students in a certificate or diploma program must be registered for a minimum of eight credits per term.

In addition, the student must not have received assistance for a period exceeding:

- a) 39 months of university studies towards a single bachelor's degree;
- b) 47 months of university studies towards a single bachelor's degree which required more than 90 credits (not applicable to Mature students);
- c) 55 months of university studies towards a single bachelor's degree in a co-op program;
- d) 31 months of university studies towards a master's level degree;
- e) 35 months of university studies towards a master's level degree with thesis;
- f) 47 months of university studies towards a doctorate degree.

The periods described above (a,b,c, and d) are not cumulative, but are independent of each other. Students in university programs may not receive assistance for more than 88 months of full-time study.

The Government of Quebec sets the following maximum cumulative debt loads. Please be advised that the maximum cumulative debt load is unrelated to students' eligibility periods; in other words, students might not be eligible for any assistance if they have accumulated a maximum debt load even if they have not used all their eligibility periods.

<i>Level of study</i>	<i>Maximum limit of loans</i>
Secondary vocational school	\$ 22,000
College: general	\$ 16,000
technical	\$ 23,000
non-subsidized	\$ 27,000
University: undergraduate programs requiring less than eight terms (BA)	\$ 30,000
undergraduate programs requiring more than eight terms (co-op, engineering)	\$ 36,000
graduate: master's level	\$ 42,000
master's level with thesis	\$ 48,000
doctorate level	\$ 55,000

Financial Assistance for Part-Time Students

Consult the Aide financière aux études website at www.afe.gouv.qc.ca/index.asp for funding available to part-time students.

Physically Disabled Students

Students in any Faculty, who are Canadian citizens or permanent residents and who have resided in Quebec for one year prior to their full-time studies, may apply for a bursary if they suffer from a recognized major functional physical disability. Applications are available from the Financial Aid and Awards Office as well as at the Office for Students with Disabilities. Further information is also available at the Office for Students with Disabilities.

Explore (Second-Language Summer Program)

Bursaries will be granted to students across Canada to enable them to enrol in a five-week immersion course in French or English at accredited institutions.

The aim of this program is to provide post-secondary students with the opportunity to learn one of Canada's official languages as their second official language and to improve their knowledge of the culture represented by that language. Candidates whose mother tongue is neither French nor English may not receive bursaries to study English or French as their first official language. These bursaries will defray the cost of tuition, instructional materials, and room and board, but will not cover transportation costs or pocket money.

Inquiries regarding the awarding of bursaries (e.g. eligibility) should be made to the students' provincial coordinator or territorial official, the names and addresses of which are available at the Financial Aid and Awards Office.

Eligibility:

Students are eligible if they meet the following conditions:

- are Canadian citizens or permanent residents at the time of application. Students studying in Canada on visas are not eligible;
- have general post-secondary standing or can prove that they will have obtained such a status by the time they become involved in the program;
- were enrolled as full-time students during the previous academic year.

Language Assistant Programs (Odyssey, Accent)

Language assistants are students who help students with the spoken language by conveying to them the real-life aspect of the language. They carry out their duties under the supervision of second-language teachers. Full-time language assistants work for nine months (September to May 31) for an average of 25 hours per week and may earn up to \$18,500. Part-time language assistants are employed for eight months for an average of eight hours per week (September to April). The program also provides reimbursement for certain expenses. For further information contact the Financial Aid and Awards Office.

18.6.2 Federal and Provincial Student Loans and Bursaries

Students applying for Federal and Provincial Loans (other than Quebec) must be Canadian citizens or permanent residents with one year's residency, without pursuing full-time studies, and domiciled in the province to which they apply.

More information about the provincial loans application can be found at: concordia.ca/admissions/financial-aid-and-awards.

18.6.3 Concordia University Financial Aid

Work-Study Program

Work-Study is a financial aid program funded by Concordia University, the Department of Aide financière aux études du Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie, and La Direction des affaires étudiantes et de la coopération internationale du Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie. It is designed to assist full-time Concordia University students (with the exception of the summer term), who are in financial need, to pursue their academic goals by providing part-time employment on campus. (Up to 20 hours per week for a maximum of 200 hours per term.)

Eligibility: A student is eligible to participate in the Work-Study Program if he/she meets the following criteria:

- must be a Canadian citizen, a permanent resident, or an International student;
- must maintain full-time course load (with the exception of the summer session) at Concordia University for the academic session(s) in which the Work-Study position is performed;
- must demonstrate financial need as evidenced by a needs test done by the Financial Aid and Awards Office.

Further information on this program can be obtained at the Financial Aid and Awards Office and by reading the *Work-Study Program Student Information Booklet* at: faao.concordia.ca/main/workstudy.

Tuition Deferrals

Students who are blocked from registering for an upcoming term because of an overdue student account balance may apply for a tuition deferral which would provide them the ability to register for courses.

Eligibility for a tuition deferral is based upon the following conditions:

- The student has received confirmation of funding from a government student aid program that is disbursed by the University's Financial Aid and Awards Office.

- The amount of upcoming government student aid must be greater than the overdue amount in the student's account balance (i.e. fall student aid disbursement is \$3,000 and the outstanding student account balance is \$2,500).
- The student must plan to register as a full-time student, according to his/her government's definition of full-time.
- The student must have a plan on how he/she will be able to enter his/her next term of study without requiring an additional tuition deferral.
- There may be further requirements or conditions if a student has received a tuition deferral in a previous term.

If students receive approval for a tuition deferral, they will still be responsible for late fees and interest on their outstanding loan balance. The purpose of applying for a tuition deferral is to allow students participating in a government loan/bursary program the opportunity to register for the upcoming term.

Students must meet with a financial aid advisor to apply for a tuition deferral.

Short-Term Advances

Funds are available at the Financial Aid and Awards Office for students experiencing financial difficulties. Such advances are issued to undergraduate and graduate, full-time and part-time students at Concordia University. Students must see a Financial Aid and Awards officer for further information on eligibility requirements and conditions.

Emergency Financial Assistance

Emergency bursaries, food and pharmacy vouchers, and bookstore lines of credit are also available to students who are experiencing circumstances which are creating considerable financial hardship for them and which require an urgent financial response.

18.6.4 Concordia University Scholarships and Bursaries

Concordia University Awards

Two types of awards are available to undergraduate students through the Financial Aid and Awards Offices: scholarships and bursaries.

Entrance scholarships and entrance bursaries are available to newly admitted students entering university programs for the first time. In-course scholarships and in-course bursaries are available to returning students who have completed at least one year of studies at Concordia University. In all cases, scholarships are awarded on the basis of scholastic achievement and, in some cases, consideration is given to the involvement in university life or other non-academic criteria.

Bursaries are awarded based on financial need and acceptable academic standing, and sometimes additional criteria may apply. Unless otherwise stated, all awards are granted to full-time students who are Canadian citizens or permanent residents. Unless expressly authorized by the University Undergraduate Scholarships and Awards Committee, award recipients may hold only one of the following types of awards in a given academic year: Concordia entrance scholarships, Concordia in-course scholarships, or Concordia in-course bursaries.

For additional information on all undergraduate awards, consult the Financial Aid and Awards Office (FAAO) website at faao.concordia.ca.

Entrance Scholarships

A number of scholarships are available to students entering their first year of full-time study. These are awarded by the University Scholarship and Awards Committee on the basis of academic achievement during the first three semesters of Cegep or equivalent. For a complete list, consult the FAAO website.

In-Course Scholarships

In-course scholarships are awarded to full-time students (unless otherwise indicated) who have completed at least 24 credits at Concordia. Recipients are selected in the summer on the basis of the previous year's academic achievement. The scholarships are paid in the following fall and winter terms. Recipients must maintain their full-time status throughout the year the award is tenable. Unless otherwise indicated, no application is required. Academic performance is reviewed with the Office of the Registrar. For a complete list, consult the FAAO website.

Entrance Bursaries

Entrance bursaries are available to students entering university studies for the first time. They require completion of an entrance bursary application form, which must be submitted along with various supporting documents directly to the Financial Aid and Awards Office. Eligibility is determined following a financial needs test, a review of the candidate's academic ranking as assigned during admission application processing, and an appreciation of the applicant's personal statements on the entrance bursary application form. For a complete list of available entrance bursaries, consult the FAAO website.

In-Course Bursaries

In-course bursaries are awarded on the basis of financial need and satisfactory academic standing.

Unless stated differently, bursaries are available to full-time students who are Canadian citizens or permanent residents. For a complete list, consult the FAAO website.

18.6.5 Awards Offered by External Organizations

Awards sponsored and administered by external associations, companies, foundations, societies, and clubs, are listed from time to time on the FAAO website and bulletin boards. In general, applications must be submitted to the organization administering the award, unless otherwise indicated.

18.6.6 International Students

International Student Tuition (IST) Bursary Program:

The IST Bursary Program is a means of financial assistance specifically for full-time undergraduate International students paying International tuition fees. Bursaries are awarded on the basis of both scholastic merit and financial need. For further information on this program, consult the FAAO website.

American Students:

American students studying at Concordia are eligible for financial aid through the U.S. Department of Education (full-time: 12 credits or more or half-time: 6 credits or more) in the form of a Federal Stafford Loan or Parent Plus Loans. In order to be eligible, undergraduate students must be enrolled in a minimum of 6 (on-campus) credits per term. Upon acceptance to Concordia, students requesting U.S. government aid must complete a Free Application for Federal Student Aid form (FAFSA) online at fafsa.ed.gov. For the FAFSA form, Concordia's school code is 00836500. The result of the FAFSA is the Student Aid Report (SAR), which is the result of a financial needs test, and it must be submitted (along with the loan application[s] and Master Promissory Note) to the Financial Aid and Awards Office for approval. Upon receipt of the above-mentioned documents, a financial aid advisor will assess a student's need and determine the loan amounts that may be borrowed from the U.S. Department of Education. This assessment is called the Cost of Attendance and is based on the current-year tuition fees, books, and living expenses. For further information about requesting student loan aid from the U.S. Department of Education, please consult the FAAO website.

Students from Other Countries:

Students from abroad may apply for the International Student Tuition Bursary Program, which is a means of financial assistance for full-time undergraduate International students who are paying International tuition fees. These bursaries are awarded on the basis of both scholastic merit and financial need. For further information about this program, consult the FAAO website. Apart from the International Student Tuition Bursary Program, the majority of merit-based scholarships and need-based bursaries offered through Concordia University are restricted to Canadian citizens and permanent residents only. However, a growing number are open to, but not restricted to, International students. With the exception of U.S. Student Loans, other governmental student loan programs administered by Concordia University are not available to International students. Students studying on a student visa who require financial aid should, therefore, contact their home country's Department of Education. The Canadian International Development Agency offers training assistance to most developing countries with which Canada has a co-operative agreement; however, students must be nominated by their own government. For further information, contact the Scholarship Committee, Human Resources Directorate, Canadian International Development Agency, 200 Promenade du Portage, Hull, Quebec, K1A 0G4. Students should try to obtain adequate finances before coming to Canada. If students do not plan to return home during the summer, four additional months of living expenses should also be provided for.

18.7 RECREATION AND ATHLETICS

The Department of Recreation and Athletics believes physical fitness, interuniversity athletics, and recreation opportunities are an integral part of a Concordia University education. Its goals are to provide services and programming that enrich the educational experience of students and to offer opportunities for staff, faculty, and the local community to be physically active in a safe, healthy environment.

Recreation and Athletics facilities can be found on both campuses. The Loyola Campus facility is the focal point of Stingers varsity sports and intramural leagues. It also hosts a small number of instructional activities. The facility includes two full-length, state-of-the-art artificial playing surfaces with lighting, one of which is a 4,000-seat stadium; the Ed Meagher Arena; a gymnasium; and a modest weight room. The new Stinger Dome is a facility that opens annually in November and is available for use through the month of April. Flag football, soccer, rugby, ultimate and a golf practice range are just some of the activities that can be found there.

Le Gym, the new fitness centre located on the Sir George Williams Campus in the Engineering, Computer Science and Visual Arts Complex, is a comprehensive workout facility and is the focal point of instructional programs. It is conveniently located at the metro level of the EV pavilion — adjacent to the tunnels to the John Molson School of Business and the tunnel connecting to the Hall and Library buildings.

The intercollegiate program gives more than 350 elite student-athletes the opportunity to represent Concordia University at provincial, national, and international competitions. The Stingers compete in the following sports: football, basketball, hockey, rugby, soccer, wrestling, baseball, golf, cross-country, and skiing. Concordia student-athletes compete in more than 200 events every year. For additional information, see stingers.ca.

The Campus Recreation program offers more than 50 activities to choose from. Programs range from intramural team sports to instructional offerings in aerobics, dance, martial arts, and relaxation. For additional information, see athletics.concordia.ca/campus.

Loyola Campus

7200 Sherbrooke St. W., Room: PA 104
514-848-2424, ext. 3858
Fax: 514-848-8637

Stinger Dome

7200 Sherbrooke St. W.
514-848-2424, ext. 8860
stingerdome@concordia.ca

Sir George Williams Campus

1515 St. Catherine St. W., Room: EV S2.202
514-848-2424, ext. 3860
Fax: 514-848-3441

International Students

19.1 ADMISSION REQUIREMENTS

19.1.1 Admission Requirements

19.1.2 Language Proficiency

19.2 IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY

19.2.1 Immigration Procedures

19.2.2 Studying for Six Months or Less

19.2.3 Immigration Documentation Required

19.3 TUITION AND OTHER FEES FOR INTERNATIONAL STUDENTS

19.4 SCHOLARSHIPS, BURSARIES AND LOANS

19.5 INTERNATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE

19.6 WORKING AS PART OF A CO-OP OR INTERNSHIP PROGRAM

Section 19

In this section, International students will find relevant information on admission requirements, immigration regulations, tuition fees, scholarships and bursaries, the health insurance plan, as well as regulations on working in Canada.

The International Students Office (ISO) is a member of Advocacy and Support Services, Student and Enrolment Services, and has developed support services to promote the adjustment of International students to life and study in Canada. For additional information on these services, see §18.3.2.

Upon arrival at Concordia University, new International students must attend an Immigration Information Session organized by the International Students Office. Students should also attend a Health Insurance Information Session and pick up a health insurance card or, in exceptional cases, opt out of the health insurance plan (see §19.5 for further details).

It is essential that International students bring their immigration documents and/or passport (see §19.2.2 and §19.2.3 for further details) to the International Students Office (Hall Building, Room: H 653) as soon as possible.

Immigration regulations cited in §19 are valid at the time of this writing. For further information, students should contact the Canadian consulate/embassy in their country.

19.1 ADMISSION REQUIREMENTS

19.1.1 Admission Requirements

Concordia welcomes applications for admission from well-qualified students from other countries. In general, students are expected to have completed the level of education required for university admission in their home country. The school-leaving subjects taken by the candidate should normally be appropriate for the degree program to which application has been made. Some programs have additional requirements, e.g. audition, interview, portfolio. Since entry to many programs is limited, the satisfaction of minimum requirements does not guarantee entry to the University.

Depending on their educational background, applicants are considered for entry to three-year (90 credits) or four-year (120 credits) degree programs. In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education), the program requires four to five years.

Advanced Level and Advanced Subsidiary Examinations

The minimum admission requirements are two A-level examinations plus three appropriate GCSE/IGCSE examinations.

An average grade of "D" or better in Advanced-level subjects is expected. In the case of certain quota programs where enrolment is limited, candidates will have to present higher grades in order to compete successfully for places at the University. Two appropriate AS (Advanced Subsidiary) Levels may be accepted in lieu of an Advanced Level for the purpose of satisfying the general entrance requirements of the University.

Students who have not written Advanced-level examinations but who have high grades in at least five appropriate GCSE subjects plus one full year of formal schooling beyond the GCSE level in a suitable academic program in a recognized school or college, may be considered for admission to an undergraduate program requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education), the program would require four to five years.

United States

High school graduates with strong grades from accredited schools who have followed an academic program designed for university entrance may apply for admission to an undergraduate program requiring the completion of 120 credits (four years). In the case of the BEng, BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education), the program requires four to five years. A General Education Diploma (GED) is not recognized as meeting the requirements for admission to a degree program.

Applicants are required to have a better-than-average school record. While no set pattern of courses in high school is required, all applicants are expected to have taken four units of English. Those applying for admission to Science or Engineering must include three or four units in mathematics and two in the sciences. At least three units of appropriate mathematics are recommended for admission to the John Molson School of Business.

Although not required for admission, letters of recommendation from school guidance counsellors and the results of aptitude and achievement tests (SAT, ACT) are helpful additions to an application.

Students who have passed Advanced Placement examinations in appropriate subjects with a grade of "3" or better may be awarded transfer credits.

France

Students who have completed the requirements for the Baccalauréat with satisfactory results may be considered for admission to an undergraduate program requiring the completion of 90 credits (three years), or 120 credits (four years) for the BA (Early Childhood and Elementary Education), BEd (TESL), BSc (Exercise Science/Athletic Therapy), and BFA (Specialization in Art Education).

The number of credits required for the BEng varies according to the option chosen and to the previous preparation of the student, but is usually no fewer than 119.

In cases where the Baccalauréat specialization (serie) followed does not fully satisfy the entrance course requirements for the degree program sought, the student, if admitted, will have to include the designated prerequisites as part of the first-year program. In some instances, the prerequisites must be taken in addition to the undergraduate program.

International Baccalaureate

Candidates who complete the full IB Diploma and who obtain a minimum total of 27 points, may be considered for admission to the three-year (90 credits) programs of study (four years of study in the BEng, BA [Early Childhood and Elementary Education], BEd [TESL], BSc [Exercise Science/Athletic Therapy], and BFA [Specialization in Art Education]). Minimum scores in prerequisite subjects as well as a higher overall average may be required for competitive programs. Students who have not completed the full IB Diploma program but have IB Certificates in individual Higher Level subjects may be eligible for credit.

Other Countries

Candidates applying from other countries who have completed the level of education required for university admission in their home country will be considered for admission provided that better-than-average grades have been attained. In most cases, a specific minimum overall standard is required. More specific information with respect to admission requirements can be found by visiting the University's website: www.concordia.ca.

Transfers from Post-Secondary Institutions

Transfers from post-secondary institutions are referred to §13.3.4.

19.1.2 Language Proficiency

The language of instruction at Concordia University is English. For information regarding the language proficiency requirement, refer to §13.4.

19.2 IMMIGRATION PROCEDURES AND DOCUMENTATION REQUIRED FOR THE UNIVERSITY

19.2.1 Immigration Procedures

All persons, other than Canadian citizens and landed immigrants, who wish to pursue their studies in the province of Quebec, must obtain a *Quebec Acceptance Certificate (CAQ)* and a *Study Permit*. However, if their program of study is six months or less in duration, students have the option of studying in Canada without having to apply for a *CAQ* or *Study Permit* provided they complete their studies within the authorized period of their stay in Canada. This regulation may be of particular interest to a Visiting student, exchange student, or any other student whose program of study will not exceed six months and which can be completed within the allowable period of their stay in Canada (see §19.2.2). Citizens of a number of countries must have a visa to enter Canada. Students should verify with the Canadian immigration authorities in their country to check if they need a Temporary Resident Visa (TRV or Entry Visa) to enter Canada.

For students studying for more than six months, immigration documents are required to study at Concordia University. The *CAQ* is issued by the Ministère de l'Immigration et des Communautés culturelles (Quebec immigration authorities), and the *Study Permit* by federal visa departments including Canadian consulates, embassies or high commissions abroad.

As it may take several months to obtain the *CAQ* and *Study Permit*, it is strongly recommended that the application process be started **immediately** upon receipt of the letter of admission from Concordia University. Failure to obtain these documents may prohibit study. For further information, please consult the *ISO Pre-Departure Guide for International Students* available at the International Students Office website: supportservices.concordia.ca/iso. **Students who do not receive their documents in time for the beginning of the term must consider deferring.**

When applying for the *Quebec Acceptance Certificate* and the *Study Permit*, International students are required to present evidence of sufficient funds for tuition and living expenses. **Concordia University cannot assume financial responsibility for students who do not have adequate funds.** For more information, please see the *CAQ* and *Study Permit* applications as well as the *ISO Pre-Departure Guide* for more information.

Processing fees will be charged by both the Ministère de l'Immigration et des Communautés culturelles (Quebec immigration authorities) and Citizenship and Immigration Canada for the issuance of a *Quebec Acceptance Certificate* and a *Study Permit*. If students are under **18 years of age**, both the Ministère de l'Immigration et des Communautés culturelles (Quebec) and Citizenship and Immigration Canada require that the student provide legal proof of guardianship here in Canada. The University may act as legal guardian only to students residing on campus within the University residence. Contact the ISO for more information.

19.2.2 Studying for Six Months or Less

Studying Without a *CAQ* and a *Study Permit* in a Program of Study of Six Months or Less

Regulation 188(1) of the Immigration and Refugee Protection Regulations reads as follows:

A foreign national may study in Canada without a study permit:

c) if the duration of their course or program of studies is six months or less and will be completed within the period for their stay authorized upon entry into Canada.

This regulation may be of particular interest to foreign nationals who are coming to Canada for a short period of time, such as exchange and Visiting students (with an offer of admission for one term only). It is understood, however, that this regulation only applies to a course or a program of study of a duration that **will not** exceed a six-month period.

Despite regulation 188(1), foreign nationals may still apply for a CAQ and a *Study Permit* if they wish to get these documents.

There are certain advantages in having a CAQ and a *Study Permit* for studying in Canada, such as:

- **Working on campus:** Only students holding a *Study Permit* are authorized to work on the campus of the institution where they are registered as full-time students.
- **Intent to pursue another program:** If a student is considering pursuing another course or program of study after the six-month period.

Citizens of a number of countries must have a visa to enter Canada. Students should:

- verify with the Canadian immigration authorities in their country to check if they need a Temporary Resident Visa (TRV or Entry Visa) to enter Canada.

Be sure to travel with the letter of admission from Concordia. Upon arrival in Canada, a Canada Customs officer may ask for this letter as a proof of enrolment in a program of study of six months or less.

19.2.3 Immigration Documentation Required

International students who will be studying in a program for six months or more are required to provide a copy of their CAQ and *Study Permit* to the International Students Office, 1455 De Maisonneuve Blvd. W., Hall Building, Room 653, when they first register at Concordia and thereafter every time they renew their immigration documents.

International students who will be studying for six months or less are required to submit copies of their passport pages showing the passport number, the dates of issuance and expiry, name and date of birth, and the stamp made by Canadian authorities on their most recent entry into Canada.

Failure to comply with these regulations could result in the cancellation of the student's registration.

These directives are in accordance with the funding regulations of the Ministère de de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie which requires that all International students registered at a university in Quebec have in their permanent file a copy of their *Quebec Acceptance Certificate*, their *Study Permit*, and for persons studying six months or less, a copy of the appropriate passport pages.

International students are required to provide the appropriate documentation to the International Students Office before the DNE deadline of their first term at Concordia.

Failure to comply with this regulation could result in the cancellation of the student's registration.

19.3 TUITION AND OTHER FEES FOR INTERNATIONAL STUDENTS

The fees, payable to the University for the regular session of two terms commencing in September and concluding in April, are approximately \$18,220 to \$21,688 for a full-time student. This amount includes tuition fees for 30 credits; compulsory fees which include student services, recreation and athletics, technology infrastructure, copyright and association and activity fees; administration fee; registration fees; and the health insurance premium. This estimate does not include the cost of textbooks or living expenses. Please refer to the Tuition and Fees website at concordia.ca/admissions/tuition-and-fees for information concerning the payment of tuition and fees.

Exemptions from Differential Fees

Certain International students may be eligible to pay the same fees as Quebec residents. Students who qualify for an exemption from the differential fees for International students, pay tuition and other fees at the same rate as the Canadian, Quebec resident student (including tuition and compulsory fees for 30 credits, and the International students health insurance fee). The following are among those exempted from paying differential fees:

1. diplomats, consular personnel, accredited representatives or civil servants of a foreign country, the United Nations or one of its organizations, an intergovernmental organization to which Canada belongs, and any member of the staff of the above-listed persons who are working in Canada in an official capacity and who have obtained an attestation issued by "le Protocole" (Gouvernement du Québec), 525 René-Lévesque E., Quebec City, telephone: 418-649-2346. This attestation is valid for one academic year and must be renewed each year the student attends university;
2. the spouse and unmarried children of the above-listed persons;
3. an International student whose spouse or parents hold certain work categories of work permits in Quebec. For further details and verification, please contact the Office of the Registrar, Room LB 700, 514-848-2424, ext. 2624;
4. a student who is registered at a university and who has come to Quebec as an exchange student, or as a student participating in a program of co-operation agreed to by the Government of Quebec and which exempts the participants from paying differential fees;

5. a student who is a French citizen (accord France-Québec) and has not resided in another Canadian province or territory immediately prior to coming to Quebec;
6. a student who is admitted to a Quebec university and whose country has a fee remission agreement with the Government of Quebec. The Government of Quebec has agreements for granting a **limited** number of exemptions from the differential fees for International students from the following countries:
 Algeria, Andorra, Belgium (Flemish Community), Belgium (French Community), Benin, Burkina Faso, Cameroon, China, Colombia (ICETEX), Congo (Brazzaville), Democratic Republic of the Congo, Egypt, Gabon, Germany (Bavaria, DAAD), Guinea, Haiti, India, Israel, Italy, Ivory Coast, Korea, Lebanon, Luxembourg, Madagascar, Mali, Mauritania, Mauritius, Mexico (CONACYT, SEP, SRE), Morocco, Niger, Peru, Rwanda, Senegal, Spain (Catalonia), Togo, Tunisia, and Vietnam.
 Inquiries and applications for an exemption should be made directly to the students' own Ministry of Education prior to leaving their home country. In some cases, when the person is in Canada, it may be possible to apply for an exemption at his or her embassy or consulate in Canada or in the United States;
7. a student who is registered at a university and whose status as a permanent resident has been officially recognized by Immigration Canada. Should a student receive permanent resident status during the academic year, he or she should immediately present the official document to the Office of the Registrar, Room LB 700, to have his or her status changed and to inquire about a possible refund. For more information on refund policies and deadlines for submission of documents, please contact the Office of the Registrar. International students should present themselves at the International Students Office, Hall Building, Room 653, to request an exemption and possible refund from the International Student Health and Accident Insurance Plan;
8. under certain conditions, students who have obtained Convention refugee status may be eligible for an exemption from the differential fees for International students. Depending on the documentation submitted, they may be eligible to pay either the Quebec tuition rate or the Canadian non-Quebec rate. For information on deadlines for submission of documentation and on the specific documents required, please contact the Office of the Registrar;
9. under certain conditions, International students holding certain categories of CSQ who are allowed to apply for permanent resident status from **within** Canada may be eligible to pay the Quebec tuition rate.

19.4 SCHOLARSHIPS, BURSARIES AND LOANS

Two types of awards are available to undergraduate students through the Financial Aid and Awards Offices: scholarships and bursaries.

Entrance scholarships and entrance bursaries are available to newly admitted students entering university programs for the first time. In-course scholarships and in-course bursaries are available to returning students who have completed at least one year of studies at Concordia University. In all cases, scholarships are awarded on the basis of scholastic achievement and in some cases, consideration is given to the involvement in university life or other non-academic criteria.

Bursaries are awarded based on financial need and acceptable academic standing, and sometimes additional criteria may apply.

Unless otherwise stated, awards are restricted to full-time students who are Canadian citizens or permanent residents.

For additional information on all undergraduate awards, consult the Financial Aid and Awards Office (FAAO) website at faao.concordia.ca.

International Student Tuition Bursary Program

Students from abroad may apply for the International Student Tuition Bursary Program, which is a means of financial assistance for full-time undergraduate International students who are paying tuition and fees at the International rate. These bursaries are awarded on the basis of both scholastic merit and financial need. For further information about this program, consult the FAAO website.

American Students

American students studying at Concordia are eligible for financial aid (full-time: 12 credits or more or half-time: 6 credits or more) in the form of a Direct Loan from the U.S. Department of Education.

Upon acceptance to Concordia, U.S. students seeking assistance (financial aid) must complete a Free Application to Federal Student Aid form (FAFSA) online at fafsa.ed.gov. For the FAFSA form, Concordia's school code is 008365.

The original Student Aid Report (SAR), which is the result of a financial needs test, must be submitted (along with the loan application[s] and Master Promissory Note) to the Financial Aid and Awards Office for approval. Upon receipt of the above-mentioned documents, a financial aid officer will prepare an assessment (Cost of Attendance) based on the current-year tuition fees, books, and living expenses, determine the amount of aid, complete the school certification, and send it to the appropriate lender/guarantor.

For further information on this program, consult the FAAO website.

The John Molson School of Business International Entrance Scholarship

The John Molson School of Business International Entrance Scholarship is intended to encourage and reward newly admitted full time International students in the John Molson School of Business, in the form of partial assistance with their tuition and fees.

The scholarship may be renewed on the basis of continuing full-time enrolment and a minimum last annual GPA of 3.30.

This merit-based award is part of the Undergraduate Entrance Scholarship Program. No application is necessary; candidates are selected by the University in the fall term every year.

Exemption from Higher Tuition Fees

The Government of Quebec has agreements for granting a **limited** number of exemptions from differential fees for International students from specific countries. Consult §19.3.6 for the list of countries and information. Further information regarding the Exemptions from Supplemental Tuition Fees may be obtained from the following website: www.mels.gouv.qc.ca/sections/publications/publications/Ens_Sup/Affaires_universitaires_collegiales/Ens_et_recherche_universitaires/Ens_et_recherche_universitairesPaysEtQuotas2010.pdf.

Other Awards

Information on awards to International students and trainees is also available in the brochure *Awards for Study in Canada* published by the Canadian Bureau for International Education. For further information, write to CBIE, 220 Laurier Ave. W., Suite 1550, Ottawa, Ontario, Canada, K1P 5Z9; telephone: 613-237-4820; website: cbie.ca; email: info@cbie.ca.

Emergency Loans

Funds are available at the International Students Office and at the Financial Aid and Awards Office for short-term emergency loans. Loans are issued to full-time undergraduate and graduate students who need temporary emergency financial assistance. For further information on eligibility requirements and conditions, contact the coordinator, International Students Office, Room: H 653, 514-848-2424, ext. 3514.

19.5 INTERNATIONAL STUDENT HEALTH AND ACCIDENT INSURANCE

Immigration Quebec services and the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie require that all International students be covered by a health insurance plan while studying and living in Quebec. To this end, Concordia University has implemented a **compulsory** health and accident insurance plan for its International students. Health insurance fees are charged automatically when International students register for courses.

Check the International Students Office website at supportservices.concordia.ca/iso for the cost for single coverage. Family and couple coverage are also available upon request. **Coverage is from August 15 until August 14 of the following year. Students who register in January pay a pro-rated premium for the eight-month period ending August 14 of the same year.**

Only certain categories of International students are permitted to opt out of the Concordia Health Insurance Plan for International Students. These categories are listed below. Please note that Concordia University does not accept any other kind of health insurance plan that the student might be carrying or maintaining while coming to Canada.

1. Students who have a valid Quebec Medicare card / *Carte d'assurance maladie du Québec* (RAMQ). Please note that students who are eligible for RAMQ coverage are **not** covered by the Concordia Health Insurance Plan for International Students regardless of when students submit the documents to the University.
2. As a result of intergovernmental agreements, full-time students from **Denmark, Finland, France, Luxembourg, Norway, Portugal, and Sweden** who were covered under their government's medical system before their arrival in Quebec, are eligible for the Quebec medical benefits (called Quebec Medicare card or *Carte d'assurance maladie du Québec*). These students must apply for the Quebec Medicare card. Further information is available at the International Students Office.
3. International students **who receive a scholarship (including group health insurance and tuition fees) from a sponsoring organization or government** (such as CIDA, ICCS, CBIE, WUSC). Students must ensure that their scholarship letter clearly mentions the health insurance coverage as well as the duration of the policy. These students and their sponsors must complete a *Waiver of Health Insurance for International Sponsored Students* provided at the ISO. Please note that individual health insurance plans are not accepted.
4. Refugee claimants and Convention refugees who can show proof of medical coverage by the Canadian or Quebec Government.
5. International students who become permanent residents of Canada. An exemption/adjustment will be based on the date the International Students Office receives the record of landing document.

Proof of above-mentioned insurance is required in order to process an exemption. It must be presented in English or French indicating the period and amount of coverage available in Canada. This information is required by the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie and must be in the Concordia student's file for audits and reports. Applications for exemptions are processed in person at the International Students Office (ISO), Hall Building, Room H 653. Applications must be processed every year before the prescribed deadlines; requests received after the deadlines and approved by the ISO will be charged an administration fee.

Refunds will be considered only for students who have **not filed any claim** to the insurance company during the current insured period. Refunds are given in a form of credit to the student's university account.

OPTING-OUT DEADLINES

For all students beginning their insurance coverage in the fall term (August/September):

- First deadline: October 31
Full refund
- Second deadline: December 21
Partial refund
(administrative fee: \$100)
- Final deadline: May 1
Partial refund
(administrative fee: \$200)

No refund will be approved after this final deadline.

For all students beginning their insurance coverage in the winter term (January):

First deadline: February 28

Full refund

Final deadline: May 1

Partial refund

(administrative fee: \$100)

No refund will be approved after this final deadline.

For all students beginning their insurance coverage in the summer term (May):

Final deadline: 30 days following the start of their first summer course

Full refund

No refund will be approved after this final deadline.

19.6 WORKING AS PART OF A CO-OP OR INTERNSHIP PROGRAM

Some academic programs require that students complete a work term(s) in order to complete the degree requirements.

International students who are enrolled in such programs **must** apply for a Co-op *Work Permit*. For further information, refer to: cic.gc.ca/English/study/work-coop.asp or visit the International Students Office.

Student Associations and Alumni Relations

20.1 UNDERGRADUATE STUDENTS

20.2 GRADUATE STUDENTS

20.3 ALUMNI RELATIONS

Section 20

20.1 UNDERGRADUATE STUDENTS

The **Concordia Student Union (CSU)** represents all undergraduate students, both full-time and part-time. Besides organizing many events and activities, the CSU ensures student representation on University decision-making bodies, both those that legislate on academic and administrative matters and those concerned with the cultural and social life of the community. There are student members of the Board of Governors, Senate, the Faculty Councils, and the Concordia Council on Student Life, which is directly concerned with all issues pertaining to student life including the provision of student services.

Powers and responsibilities are divided between three bodies: the Executive, the Council of Representatives, and the Judicial Board. The Executive is headed by an elected president. The Council of Representatives consists of students elected from the four Faculties and Independent students. The Judicial Board is an appointed body charged with assuring the constitutionality of any new legislation or resolution of conflicts.

Students in the four Faculties are also represented by their own associations: the **Arts and Science Federation of Associations (ASFA)**, the **Commerce and Administration Students' Association (CASA)**, the **Engineering and Computer Science Students' Association (ECA)**, and the **Fine Arts Student Association (FASA)**.

There are over 150 student clubs and associations. They may be associated with a department or discipline, such as the Psychology Students' Association, or pursue a special interest like the Concordia Volunteer Abroad Program. Each has its own program of activities funded by student fees. In addition, there are a number of independent groups on campus that provide a variety of ways for students to engage in campus and community life.

Amongst these independent groups are student media including the television station *CUTV*, the radio station *CJLO*, and two student newspapers, *The Link* and *The Concordian*. These media outlets operate independently of the student associations. Both newspapers are incorporated, with separate, wholly autonomous Boards of Directors.

There is a CSU office on each campus. The Sir George Williams office is in Room H 711 of the Henry F. Hall Building. The Loyola office is in the Loyola Campus Centre, SC 115. CSU's telephone number is 514-848-2424, ext. 7474; email: office@csu.qc.ca; website: csu.qc.ca.

20.2 GRADUATE STUDENTS

Graduate students become members of the Graduate Students' Association (GSA). It is concerned with graduate student representation on the Board of Governors, Senate, the School of Graduate Studies, the Faculty Councils, and the Concordia Council on Student Life, and initiates a wide range of activities for graduate students and the University community as a whole, including social occasions, lectures, and concerts. GSA's offices are at 2030 Mackay St.; telephone: 514-848-2424, ext. 7900; email: gsa@alcor.concordia.ca; website: gsa.concordia.ca.

20.3 ALUMNI RELATIONS

Concordia now boasts 180,000 alumni worldwide. At the University, the department charged with maintaining and nurturing a lasting and significant relationship with alumni and their alma mater is the Office of Advancement and Alumni Relations.

The **Concordia University Alumni Association (CUAA)** was created in 1983 to "encourage the fellowship of graduates from Loyola, Sir George Williams, and Concordia University through social, educational, and cultural activities" and to "preserve and promote the interests of Concordia University through alumni involvement in its future and governance." Graduates and attendees (who have completed 30 credits) of Concordia and of the founding institutions of Loyola College and Sir George Williams University are automatically CUAA members.

Benefits and Services – Current Students: The CUAA collaborates with Concordia's Advancement and Alumni Relations to offer students and alumni various programs and services. Even before graduation, students can take advantage of numerous services, events, and activities, including funding for student projects, the Backpack-to-Briefcase Workshops, Career Panels, the Annual International Students Holiday Dinner and Coffee Breaks during exam periods. Other services include the Online Mentor Program which matches students with Concordia alumni who dispense both professional and practical advice about the job market based on their personal experiences, the award-winning Dinner for Eight program, and the Job Shadowing program which provides students the opportunity to visit professionals at their place of work.

Benefits and Services – Alumni: With a complimentary Alumni ID card, alumni gain access to Concordia libraries, career and placement services, and discounts on tuition fees at the School of Extended Learning. Alumni are also eligible for discounts at preferred hotels, Budget Rent-A-Car, Via Rail, the Centaur Theatre, the VA Art Supply Store, the downtown YMCA, Nautilus Plus, and Campus Recreation. Alumni receive the quarterly *Concordia University Magazine* and Accent, the monthly alumni e-newsletter. They can obtain the BMO Concordia MasterCard, reduced rates on TD Insurance Meloche Monnex home, automobile, and travel insurance, Manulife health and dental insurance and critical illness plan, and discounts at Groupe Gabriel on car purchases and service appointments. Advancement and Alumni Relations also offers photography services at convocation. Alumni can explore the world through the Concordia University Alumni Travel Program, which offers unique and breathtaking destinations as well as discounts on travel with Voyages Group Ideal.

Events: The CUAA sponsors programs and events year-round that are organized by Advancement and Alumni Relations. Students, alumni, faculty, staff, and friends are always invited to Concordia's largest and most prestigious on-campus event, Homecoming, which includes special reunions, chapter and networking events, educational seminars, campus tours, Family Fair Day, and the Homecoming Football Game.

The Annual Alumni Recognition Awards Banquet honours outstanding volunteer contributions from the University's alumni, faculty, staff, students, and friends.

Staying Connected: The CUAA alumni groups on LinkedIn and Facebook facilitate networking and socializing among alumni after graduation. The Alumni Relations Twitter feed serves up daily news about alumni and their alma mater. Alumni can also register for their free Email Forwarding for Life or re-connect with lost friends and classmates through the Find-a-Friend Program.

Choose Concordians: This unique career-service program encourages Concordia alumni to support their alma mater by hiring fellow Concordians. It also creates a link between employers, on-campus recruiters and Concordia's career centres in order to boost the employment rate and internship opportunities for Concordia graduates and students.

Alumni Chapters

Worldwide Chapters: The CUAA is committed to developing and supporting a worldwide network of alumni chapters. There are active alumni groups in Beijing, Boston, Calgary, California, Dubai, Edmonton, Hong Kong, India, Japan, Jordan, London, Mexico, Mississauga, Netherlands, New York, North Carolina, Ottawa, Texas, Toronto, Shanghai, Vancouver, Washington, D.C., Washington State, and Winnipeg.

Montreal Chapters: There are also Faculty-based chapters for the Faculty of Engineering and Computer Science, the Faculty of Fine Arts, the John Molson School of Business, and the departments of Journalism and Communication Studies, the Teaching English as a Second Language (TESL) program, and the Educational Technology program in the Faculty of Arts and Science. Affinity-based chapters include those for Varsity Athletes, and members of the Garnet Key Society.

For the latest information on alumni chapters, benefits, and events, visit alumni.concordia.ca or contact Advancement and Alumni Relations, 1250 Guy St., Room FB 520, 514-848-2424, ext. 4856, fax: 514-848-2826, or email: alumni@concordia.ca.

School of Extended Learning

21.1 SCHOOL OF EXTENDED LEARNING CREDITS AND CERTIFICATES

21.2 STUDENT TRANSITION CENTRE

21.3 CENTRE FOR CONTINUING EDUCATION

21.4 UNIVERSITY OF THE STREETS CAFÉ

Section 21

21

SCHOOL OF EXTENDED LEARNING

Dean
NOEL BURKE

Location

Sir George Williams Campus
Faubourg Tower
1600 St. Catherine St. W., Room: FB 100
514-848-2424, ext. 5426

Objectives

The School of Extended Learning provides a wide range of programs and services which are aimed at increasing student accessibility to the University. Programs developed by the School of Extended Learning include credit and non-credit course offerings; distance education courses; off-campus courses and programs; and designated pre-university and entry-level courses and undergraduate certificate programs. Services are focused on three support systems: Recruitment — providing alternative entry points to university studies; Retention — assisting students to explore alternative learning paths; and Remediation programs which support student re-entry and transition to university studies. These programs and services can be accessed through the School's Student Transition Centre and the Centre for Continuing Education.

21.1 SCHOOL OF EXTENDED LEARNING CREDITS AND CERTIFICATES

Complementary University Credits

Complementary University Credits are additional to the Faculty degree and certificate requirements stipulated in the University Undergraduate Calendar. They may be taken by any student wishing to do so. However, these credits are not assessed in any GPA calculation other than for those admitted into a Complementary University Credit certificate and are not transferable to any degree or Faculty certificate.

NOTE: SEL 149 Skills for Success in University Study (4 credits) is not transferable to any degree or certificate.

The primary function of Complementary University Credits is to provide a range of programming which is complementary to programs offered by the Schools and Faculties.

Complementary University Credits are offered together with a range of student-centred services in an integrated model that includes advising, skills development, and prescriptive monitoring. These services support the application and transfer of acquired competencies to students, whether to improve employability, continue to prepare for a university education, and/or to facilitate personal or professional development.

Complementary University Credit Certificates

The School of Extended Learning offers several 30-credit certificates leading to a Concordia University Complementary University Credit certificate. The certificates are aimed at the market of active practitioners seeking qualifications and skills development related to career enhancement. They function independently of certificates, diplomas, and degrees offered by the Faculties.

Courses for Elective Credit

The School of Extended Learning also offers courses for elective credit. These courses can be used as electives for any degree program unless otherwise stated in the course description or in the degree requirements of the respective program as described in the Undergraduate Calendar. These courses are designated by the SELC course code and are described in this section under the heading School of Extended Learning Credit Courses.

Admission Requirements

Applicants must meet the minimum entry requirements to the University. (The most up-to-date information can be found at concordia.ca/admissions/undergraduate/admission-requirements.)

Applicants may be admitted as a Mature Entrant. For detailed information on this category, please refer to concordia.ca/admissions/undergraduate/admission-requirements/mature-entry.

The term "Mature Entrant" refers to those applicants who have not completed the normal academic admission requirements, as well as satisfying other criteria of age, immigration status, experience and potential, that are outlined on the link previously listed. Students will be expected to remain in acceptable academic standing by maintaining an annual GPA of at least 2.00. The School of Extended Learning will conduct the annual academic assessment for Complementary University Credit certificate students. The rules and regulations contained in §13 and §16 apply to all students admitted in Complementary University Credit certificates. Please note that provisions stated in §16.2.3 (6) **do not** apply to Complementary University Credit certificates.

All applicants are provided with a learning and study skills assessment (online). Additional courses may be required (such as English proficiency, mathematics or computer literacy) in order to satisfy admission requirements. Students will be evaluated on these skills during the admission process and will be advised of any additional requirements in their admission letter.

Required Academic Standing for Successful Completion

A cumulative grade point average of 2.00 or higher is required to be awarded the certificate.

Complementary University Credit Certificate in Business Practices

The Complementary University Credit Certificate in Business Practices is an introductory program designed for (i) current and aspiring entrepreneurs who need a foundational basis of best business practices and concepts, (ii) individuals employed in industry who wish to broaden their current knowledge of business, and (iii) students planning for a career in business.

NOTE: The Complementary University Credits earned in this certificate cannot be transferred to any degree or Faculty certificate program including those within the John Molson School of Business.

30 Complementary University Credit Certificate in Business Practices

24 SEL 151, 152, 153, 154, 155, 157, 161, 162

6 Chosen in consultation with an advisor within the School of Extended Learning

Complementary University Credit Certificate in Marketing Practices

The Complementary University Credit Certificate in Marketing Practices provides both aspiring and current marketing professionals and entrepreneurs an opportunity to explore up-to-date changes in marketing theory and practice, while at the same time examining the foundational, analytical, and conceptual tools that are common to all businesses.

NOTE: The Complementary University Credits earned in this certificate cannot be transferred to any degree or Faculty certificate program including those within the John Molson School of Business.

30 Complementary University Credit Certificate in Marketing Practices

24 SEL 151, 153, 157, 167, 168, 169, 177, 178

6 Chosen in consultation with an advisor within the School of Extended Learning

Complementary University Credit Certificate in Human Resources Practices

The Complementary University Credit Certificate in Human Resources Practices offers both current and aspiring human resource professionals an opportunity to enhance their career development by focusing on best and latest industry practices, as well as the requisite conceptual, analytical, and theoretical tools. Human resource managers and specialists face continuous challenges as organizations rapidly adapt to technological and economic evolution.

NOTE: The Complementary University Credits earned in this certificate cannot be transferred to any degree or Faculty certificate program including those within the John Molson School of Business.

30 Complementary University Credit Certificate in Human Resources Practices

24 SEL 151, 154, 155, 156, 164, 165, 166, 174

6 Chosen in consultation with an advisor within the School of Extended Learning

Complementary University Credit Certificate in Entrepreneurship

The Complementary University Credit Certificate in Entrepreneurship offers current and aspiring entrepreneurs developmental skills related to the start-up, management, marketing, and ultimate growth of their respective business concepts.

NOTE: The Complementary University Credits earned in this certificate cannot be transferred to any degree or Faculty certificate program including those within the John Molson School of Business.

30 Complementary University Credit Certificate in Entrepreneurship

24 SEL 150, 152, 157, 160, 161, 167, 170, 180

6 Chosen in consultation with an advisor within the School of Extended Learning

Complementary University Credit Courses

SEL 149 Skills for Success in University Study (4 credits)

This course is designed as an introduction to the critical elements needed for academic success at the university level. The elements are general study skills, information literacy, writing skills and motivation. Specific topics include time management, organizing content, working on group projects, formats of scholarly communication, proper citation formats, and evaluating and using information effectively. This course assists students in developing skills specific to their chosen area of study. It is evaluated on a pass/fail basis.

NOTE: Complementary University Credit courses are not transferable to any degree or certificate program. While this course may be required for certain students, it may be taken by any student wishing to do so.

SEL 150 Entrepreneurship: The Fundamentals (3 credits)

This course provides an overview of starting and managing a new business. The course focuses on concept development, the uncontrollables that can impact the nascent concept and an introduction to the specific business functions and strategies related

to marketing, finance, accounting, management and human resources.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 151 Business Practices: The Fundamentals (3 credits)

This course provides an introductory overview of the business organization, focusing on both internal issues such as the structure of business, its principal functions and activities, and social and ethical concerns, as well as external issues, such as the economic, technological, and competitive landscapes and how these influence decision-making.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 152 Business Practices: Financial Accounting (3 credits)

This course develops a foundational understanding of basic accounting principles and statements, considering the role of accounting information as it relates to decision-making. Students develop competencies in journal entry processing and in the preparation and interpretation of income statements, balance sheets, and statements of changes in owners' equity.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 153 Business Practices: Statistics (3 credits)

This course focuses on applications for quantitative analysis of data that can be employed in support of managerial decision-making. Focal points of the course include displaying and describing categorical and quantitative data, randomness and probability, sampling distributions, and hypothesis testing.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 154 Human Resources Practices: The Fundamentals (3 credits)

This course examines the theory and practical application of personnel management. Topics to be discussed include recruitment, staff selection, orientation and training, wage and salary administration, and benefits management.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 155 Human Resources Practices: Group Dynamics (3 credits)

This course explores and analyzes behavioural characteristics within organizations. Competencies are developed in identifying work group and intergroup behaviour, and in developing strategies designed to maximize organizational effectiveness.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 156 Human Resources Practices: Cross-Cultural Management (3 credits)

This course provides tools which are necessary to (a) understand the many cultural dimensions that face business managers, (b) manage a diverse work environment, (c) integrate within a foreign work setting, (d) communicate with foreign business partners and associates effectively and with sensitivity, and (e) successfully navigate culture shock and the related stress upon returning home.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 157 Marketing Practices: The Fundamentals (3 credits)

This course introduces the basic concepts of marketing by focusing on the components of the marketing mix, market segmentation, and positioning. Competencies are built by examining the changing business environments, both external and internal, and developing an understanding of relevant target markets employing rapidly evolving distribution and promotional techniques.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 160 Entrepreneurship: Management of a New Business (3 credits)

Prerequisite: SEL 150. This course introduces students to basic entrepreneurship skills. Students learn how to recognize and approach opportunity, and to assess feasibility and potential of the idea. They assemble the necessary business and financial resources to launch, organize, manage, and grow a new business profitably, respond to obstacles and change, and employ harvesting, replication and exit strategies. The course also explores the dynamics of family business, buying into a going concern and franchise opportunities.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 161 Business Practices: The Law (3 credits)

Prerequisite: SEL 151. This course focuses on the general and emerging legal principles that apply to business in Quebec and Canada. Competencies are developed in identifying and analyzing those legal issues that are pertinent to day-to-day business transactions and relationships.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 162 Business Practices: Finance (3 credits)

Prerequisite: SEL 152. This course focuses on the environment of financial management, the valuation of financial assets, long-term investment decisions, capital structure, dividend policy, and working capital management. The fundamental issue examined is how to best allocate financial resources while respecting budget constraints.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 164 Human Resources Practices: Recruitment and Selection (3 credits)

Prerequisite: SEL 154. This course focuses on methods of locating qualified candidates, employing appropriate recruitment channels, and improving the overall efficacy of the recruitment process. Competencies are built by examining such aspects as an aging workforce, increased competition for available labour, dynamic environmental conditions, and the demand for qualified candidates exceeding supply. Further understanding is developed because the selection of an inappropriate candidate to fill a position is both a costly and time-consuming proposition.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 165 Human Resources Practices: The Law (3 credits)

Prerequisite: SEL 154. This course provides an opportunity for the student to acquire knowledge of and skills in the applicability of relevant and emerging legislation to the Canadian and Quebec work setting. Aspects such as a non-discriminatory work environment, providing a safe and secure workplace, protecting privacy, and ensuring general compliance with legislation that pertains to the workplace are examined.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 166 Human Resources Practices: Organizational Health and Safety (3 credits)

Prerequisite: SEL 154. This course examines challenges in the management of occupational health and safety. It focuses on relevant organizational issues, such as enforcement of current and emerging legislation, protecting workers from ergonomic hazards, complying with the latest Workplace Hazardous Materials Information System (WHMIS) standards, and managing health and safety issues from the perspective of Total Quality Management (TQM) and global competitiveness.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 167 Marketing Practices: Research (3 credits)

Prerequisite: SEL 157. This course develops the ability to create a research design, develop an effective questionnaire or sampling instrument, and determine the appropriate sampling technique for different research scenarios. The course demonstrates that research must be performed to ascertain the value, accessibility, and general merits of the market(s) contemplated.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 168 Marketing Practices: Advertising (3 credits)

Prerequisite: SEL 157. This course focuses on the nature of services provided by advertising agencies, as well as those services that can be performed "in-house." The course investigates the needs of the user of these services, the needs of the provider, and the needs of society in economic, ethical, and legal terms. A strategic focus permeates this course, emphasizing the communication process and the role of advertising, how advertising integrates with other marketing strategy elements, and how to employ both the classic and emerging tools associated with communicating an organization's message.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 169 Marketing Practices: Global Strategies (3 credits)

Prerequisite: SEL 157. This course examines globalization and its impact on decision-making from a strategic marketing perspective. To this end, the course addresses the global marketing environment, the manner in which organizations approach global markets, and the global marketing mix.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 170 Entrepreneurship: Strategies and Practice (3 credits)

Prerequisite: SEL 160. This course focuses on the development of strategies for entrepreneurial ventures, building on concepts covered in previous courses. Strong emphasis is placed on tactical application. Case studies and live company analyses are employed liberally, examining successful business practices for both new companies and recent start-ups.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 174 Human Resources Practices: Remuneration and Benefits (3 credits)

Prerequisite: SEL 164. This course focuses on developing competence in both the designing and building of strategic compensation plans that are tailored to meet the specific challenges faced by individual organizations. Issues such as an aging workforce, the

rising costs of labour, competition for talented workers, and legislation related to wage and salary levels are examined within the context of effective compensation plans.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 177 *Marketing Practices: The Consumer* (3 credits)

Prerequisite: SEL 167. The focal point of this course is consumer decision-making. Borrowing from psychology, sociology, and anthropology, the course examines how and why consumers buy. Through the study of, among other things, the cultural, social, and attitudinal factors and their influence on consumer decision-making, current and aspiring marketing professionals gain insight on how to more effectively reach their intended market.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 178 *Marketing Practices: Strategies and Practice* (3 credits)

Prerequisite: SEL 168. This is the capstone course of the Marketing Practices Certificate, dedicated to the student with the foundational knowledge of marketing. The course focuses on cutting-edge strategy development and marketing planning, building on concepts already addressed in previous courses. Strong emphasis is placed on hands-on, tactical application. Case studies and live company analyses are employed liberally.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 180 *Entrepreneurship: Creating a Business Plan* (3 credits)

Prerequisite: SEL 170. In this course, students develop a written business plan for an existing or proposed new business, ultimately proposing the completed plan to an expert panel. It is expected that the student has a new business concept in mind at the start of the course, as this concept forms the basis of the business plan and the work to be completed throughout the term.

NOTE: Complementary University Credit courses may be taken by any student wishing to do so but are not transferable to any degree or Faculty certificate program.

SEL 197 *Selected Topics in Extended Learning* (4 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: This course may be taken by any student, but it cannot be used for credit in any degree or Faculty certificate program.

SEL 198 *Selected Topics in Extended Learning* (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: This course may be taken by any student, but it cannot be used for credit in any degree or Faculty certificate program.

SEL 199 *Selected Topics in Extended Learning* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: This course may be taken by any student, but it cannot be used for credit in any degree or Faculty certificate program.

School of Extended Learning Credit Courses

SELC 294 *Orientation to International Community Service* (3 credits)

Students prepare for service learning in an international context through reflection on key elements related to international cooperation, approaches to community development and citizen engagement. An experiential learning approach is applied, focusing on self-reflection and applied learning.

NOTE: Students registered in Applied Human Science programs may not take this course for credit.

NOTE: Students who have received credit for SEL 195 or for this topic under a SEL 198 number may not take this course for credit.

SELC 295 *Introduction to Experiential Learning* (3 credits)

This course introduces students to the theories of the experiential learning process; participatory action research methods and application; community engagement approaches; and to the development of the specialized skill sets required for specific learning activities.

NOTE: Students registered in Applied Human Science programs may not take this course for credit.

NOTE: Students who have received credit for SEL 195 or for this topic under a SEL 198 number may not take this course for credit.

SELC 296 *Service Learning Practicum* (3 credits)

Prerequisite: SEL 195 or 198A or SELC 295. Based on the knowledge and skills acquired in the introduction course and the learning goals identified, this supervised practicum is designed to assist students in acquiring experiential, on-site learning in community settings. Regular in-class seminar sessions provide opportunities for students to monitor and share their progress and learning.

NOTE: Students registered in Applied Human Science programs may not take this course for credit.

NOTE: Students who have received credit for SEL 196 or for this topic under a SEL 198 number may not take this course for credit.

21.2 STUDENT TRANSITION CENTRE

Director
DAVID GOBBY

Advisors
BRIGEEN BADOUR
STEVE CLARK
NELLY TRAKAS

Senior Students Program Coordinator
(See §13.6.4)
SYLVIA DE NIVERVILLE

Location

Sir George Williams Campus
Faubourg Tower
1600 St. Catherine St. W., Room: FB 100
514-848-2424, ext. 3891

The primary aim of the Student Transition Centre is to provide services to Mature Entry students (Undergraduate Calendar §13.6.1 and §14), to Independent students (Undergraduate Calendar §13.6.3), to non-credit Continuing Education students (Undergraduate Calendar §21.3), and to at-risk and failed students. Advisors provide students with personalized guidance and support needed for full participation in university life.

21.3 CENTRE FOR CONTINUING EDUCATION

Director
T.B.A.

Assistant Director, and Administrator of Business and Administration Programs and Computer Institute
JOHN DICKSON
514-848-2424, ext. 3603

Administrator of Visual Arts/Communications; Hospitality Management and Tourism
SANDRA ROZANSKY
514-848-2424, ext. 3605

Administrator of the Language Institute
MAUREEN R. HABIB
514-848-2424, ext. 3607

Administrator, Curriculum Development
BRENDA GRANT
514-848-2424, ext. 4312

Courses in Personal Development
514-848-2424, ext. 3602

Location

Sir George Williams Campus
Faubourg Tower
1600 St. Catherine St. W., Room: FB 100
514-848-2424, ext. 3600

As part of its commitment to the lifelong pursuit of education, Concordia University, through its Centre for Continuing Education, offers a variety of non-credit educational programs. These are designed to meet the practical needs and interests of people in the workplace, helping them to refine and improve their skills.

Students may choose individual courses or a program series to earn diplomas or certificates in a particular area of specialization. Acceptance to any of the Centre for Continuing Education's programs does not guarantee admission to, or credit towards, any of the University's degree programs.

The Centre for Continuing Education calendar (concordia.ca/conted) provides a description of the available courses and programs as well as the Centre's regulations pertaining to admission, tuition, and academic concerns.

Programs

PROFESSIONAL CAREER

DIPLOMA AND CERTIFICATE PROGRAMS

	<i>Diploma</i>	<i>Certificate</i>	<i>Full-time</i>	<i>Part-time</i>
Computer Aided Design CAD/MCAD	✓			✓
Digital Photographic Imaging	✓			✓
Graphic Applications in Desktop Publishing	✓		✓	✓
Graphic Design		✓		✓
Page Layout		✓		✓
Photoshop		✓		✓
Web Publications		✓		✓
Java EE Programming and Application Development	✓			✓
Journalism	✓			✓
Creative Writing		✓		✓
Journalism Fundamentals		✓		✓
Specialized Journalism Topics		✓		✓
Photography	✓			✓
Public Relations	✓		✓	✓
Public Relations Business Practices		✓		✓
Public Relations Digital Presentation		✓		✓
Public Relations Fundamentals		✓		✓
Visual Studio.NET Enterprise Solutions Development	✓			✓
Website Creation and Design	✓		✓	✓
Website Design Basics		✓		✓
Web Visibility and Interface Design		✓		✓
Wordpress and Javascript		✓		✓
Web Programming	✓			✓
Programming Fundamentals		✓		✓
Web Development		✓		✓
PHP and MySQL Web Applications		✓		✓

PROGRAMS AND COURSES OFFERED BY THE LANGUAGE INSTITUTE

	<i>Number of levels</i>	<i>Course hours per level</i>	<i>Full-time</i>	<i>Part-time</i>
English Intensive Program	8	260	✓	
English Conversation Program	6	40		✓
English Writing Workshop Program	5	40		✓
English Proficiency Test Preparation (TOEFL, IELTS)		40		✓
French Conversation Program	6	40		✓
French Written Communication Program	2	40		✓

The Centre reserves the right to alter the information contained in this list without notice.

21.4 UNIVERSITY OF THE STREETS CAFÉ

Imagine sitting in your neighbourhood café having a moderated conversation, open to all, on selected themes that reflect what matters to people in Montreal, allowing space for critical reflection and engagement. Please visit the website for the schedule of activities: univcafe.concordia.ca.

Teacher Training and Teacher Certification

23.1 INTRODUCTION

23.2 ELIGIBILITY/ADMISSIONS REQUIREMENTS

23.3 APPLICATION FOR ADMISSION AND CERTIFICATION

23.4 CITIZENSHIP REQUIREMENTS

23.5 ASSISTANCE

Section 23

Teacher Training and Teacher Certification:

Mr. Dominic Martini
Executive Director
Concordia Teacher Education Council

Mailing Address:
Office of the Provost and Vice-President, Academic Affairs
Concordia University
1455 De Maisonneuve Blvd. W.
Room S-GM 806
Montreal, Quebec H3G 1M8
514-848-2424, ext. 8725

23.1 INTRODUCTION

The Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) certifies teachers for the primary and secondary schools of the province, following completion of an approved 120-credit program. This certification is also subject to legislative provisions on judicial antecedents and satisfying the requirements of a MESRST-approved test of English language proficiency. The MESRST recognizes Concordia University as a centre for teacher training. Concordia offers three MESRST-approved programs that grant teaching licences (*brevets d'enseignement*). Because Concordia University has chosen not to organize its teacher training programs into a single Faculty, the programs are listed under different Faculties and departments. Students interested in pursuing teacher training and certification are asked to consult with the appropriate Faculties and academic departments for further information. These are:

Faculty of Arts and Science

Department of Education (See §31.090 and §31.090.1)

- Bachelor of Arts (BA), Specialization in Early Childhood and Elementary Education (120 credits)
- Bachelor of Education (BEd), Specialization in Teaching English as a Second Language (120 credits)

Faculty of Fine Arts

Department of Art Education (See §81.40)

- Bachelor of Fine Arts (BFA), Specialization in Art Education – Visual Arts (120 credits)

Concordia offers other certificate and diploma programs. Please refer to the Undergraduate Calendar for certificate programs, and the School of Graduate Studies Calendar for diploma and graduate certificate programs.

23.2 ELIGIBILITY/ADMISSIONS REQUIREMENTS

It is important to review the admissions regulations (see §13.3) and residency requirements (see §16.1.3) for eligibility in the MESRST-approved programs.

23.3 APPLICATION FOR ADMISSION AND CERTIFICATION

Application forms are available from the Office of the Registrar. In addition, a separate department application form is required for the BA Specialization in Early Childhood and Elementary Education and for the BEd Specialization in Teaching English as a Second Language. These application forms should be downloaded from the Department of Education's website: doe.concordia.ca. Prior to graduation, forms to apply for teacher certification are available from the Office of the Registrar.

23.4 CITIZENSHIP REQUIREMENTS

Permanent teacher certification in Quebec is only available for Canadian citizens and students who have landed immigrant status or who hold an appropriate work permit in accordance with Immigration Law of Quebec (L.R.Q., I-0.2).

23.5 ASSISTANCE

Graduates of Concordia University with certification problems should contact:

Direction de la formation et de la titularisation du personnel scolaire

Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie

1035, rue de la Chevrotière, 28^e étage

Québec (Québec) G1R 5A5

Telephone: 418-643-2948

Fax: 418-643-2149

Institute for Co-operative Education

Section 24

Director

GERRY HUGHES

Associate Director

CHEN F. HUANG

*Program Directors*CIPRIAN ALECSANDRU, *Associate Professor and Co-op Program Director, Building, Civil and Environmental Engineering*ELAINE CHEASLEY PATERSON, *Assistant Professor and Co-op Program Director, Art History*PATRICE GAILLARDETZ, *Associate Professor and Co-op Program Director, Mathematics and Statistics*HENRY HONG, *Associate Professor and Co-op Program Director, Mechanical and Industrial Engineering*ARVIND JAIN, *Professor and Co-op Program Director, International Business*MARCUS LAWRENCE, *Professor and Co-op Program Director, Chemistry and Biochemistry*JASON LEWIS, *Associate Professor and Co-op Program Director, Computation Arts*JAY MANNADIAR, *Senior Lecturer and Co-op Program Director, Finance*DANIÈLE MARCOUX, *Chargée d'enseignement and Co-op Program Director, Translation*MUSTAFA K. MEHMET ALI, *Professor and Co-op Program Director, Electrical and Computer Engineering*SUSHIL K. MISRA, *Professor and Co-op Program Director, Physics*CHRISTOPHER MOORE, *Assistant Professor and Co-op Program Director, Design*OLGA ORMANDJIEVA, *Associate Professor and Co-op Program Director, Computer Science and Software Engineering*TARA RAMSARAN, *Lecturer and Co-op Program Director, Accountancy*MICHAEL SAMPSON, *Associate Professor and Co-op Program Director, Economics*BARBARA SHAPIRO, *Senior Lecturer and Co-op Program Director, Human Resource Management*HAROLD J. SIMPKINS, *Senior Lecturer and Co-op Program Director, Marketing*RAUL VALVERDE, *Lecturer and Co-op Program Director, Business Technology Management (formerly Management Information Systems) and Supply Chain Operations Management*

The University through the Institute for Co-operative Education offers programs in the co-operative format in the departments of Chemistry and Biochemistry, Economics, Mathematics and Statistics, Physics, and Translation in the Faculty of Arts and Science; in all departments of the Faculty of Engineering and Computer Science; in the areas of Accountancy, Business Technology Management (formerly Management Information Systems), Finance, Human Resource Management, International Business, Marketing, and Supply Chain Operations Management in the John Molson School of Business; and in Art History, Design, and Computation Arts in the Faculty of Fine Arts.

As it becomes feasible, the University may consider offering other programs in the co-op format.

The Co-op Philosophy

Co-operative education is a structured educational strategy integrating academic studies with learning through program-relevant work experiences. It provides progressive experiences in integrating theory and practice, giving students the opportunity to transfer knowledge and skills between work and classroom settings.

Advantages of a Co-op Education

Integrating theory and practice in a structured and purposeful manner allows students to come to terms with the realities of professional practice in a way that allows for the development of self-confidence, self-reliance, and self-motivation. Co-operative education provides an opportunity to "test the waters" in a chosen field. With the help of the Institute for Co-operative Education, students enhance their technical knowledge and interpersonal skills through practical experience and through participation in professional seminars, workshops, and other activities.

The collaboration between employers and faculty is mutually beneficial, providing an opportunity for employers to contribute to, and influence, the educational process, and for the faculty to become aware of the latest developments in industry. In some cases joint industry-university research projects result.

Admission to Co-op

Admission to co-op is selective based on academic performance, as well as other factors such as extracurricular activities, communication skills, motivation, personality, and drive. Applicants must be legally eligible to work in Canada.

Students applying to co-op should check the appropriate box on the University Admissions form. Selected applicants may be interviewed by the appropriate co-op committee. Applicants may be asked to provide a resumé of past work experience and a statement of the reasons for their interest in the co-op format.

All individuals applying to the co-op option in the Faculty of Engineering and Computer Science are required to submit a letter of intent and a resumé with their application form. The final decision to accept or reject an applicant rests with the Director, Institute for Co-operative Education.

Co-op Fee

Students should note that a co-op fee exists to cover in part the administrative costs particular to the co-op program. This fee is currently \$185 per term and is charged for eight consecutive terms. Students requiring fewer than the normal number of terms to complete their programs in the co-op format are subject to the same total fee (\$1,480) as those requiring the normal number of terms.

The payment of the co-op fee is spread over a number of terms (fall, winter, summer). The number of terms and the level of the fee depend on the student's year of entry to the co-op program.

- For students admitted to a co-op program in their first year, the co-op fee is payable in each of the first **eight** sessions (fall, winter, or summer) in which the student either enrolls in any number of courses or is on a work term, after which no further co-op fees will be payable.
- For students admitted to a co-op program after their first year, the co-op fee is levied at a somewhat higher level, but is payable in each of the first **six** sessions (fall, winter, or summer) in which the student either enrolls in any number of courses or is on a work term, after which no further co-op fees will be payable.
- For students admitted to the Industrial Experience program, the co-op fee is payable in each of the first **two** sessions (winter and summer) in which the student either enrolls in any number of courses or is on a work term.

Co-op fees are due one month before the first day of eligible terms and are not refundable after the first day of the second month of the term, i.e. February 1, June 1, and October 1.

Co-op Performance Requirements

Students permitted to undertake their studies in the co-op format enrol full-time as regular undergraduates and are subject to their program's academic regulations. However, higher performance standards are often required to continue in the co-op format.

Students undertaking the co-op format in a program are normally required to maintain a minimum cumulative GPA of 2.50 with no grade lower than a "D" in any course, elective or required. Students registered in honours programs must meet the Faculty honours program academic requirements.

Students registered in the co-op programs in the Faculty of Engineering and Computer Science are normally required to maintain an annual GPA of 2.50.

Students registered in the co-op programs in the John Molson School of Business are normally required to maintain an annual GPA of 2.70 or better.

The work-term evaluation consists of two components:

1. student work-term performance as evaluated by the Director of the Institute for Co-operative Education or delegate, with input from the employer;
2. the work-term report or communications component and presentation evaluated by faculty, the Director of the Institute for Co-operative Education or delegate.

Each component is evaluated separately. Students must successfully complete all required components to pass the work term which is marked on a pass/fail basis. A grade of pass with distinction may also be assigned to each of the work-term courses.

A failing grade for the work term or failure to meet the co-op academic requirements will normally result in the dismissal of the student from the Institute for Co-operative Education.

A student may be exempted from any work-term requirements if he or she submits medical and/or other evidence to support such exemption to the Director of the Institute for Co-operative Education.

Work Term

Co-operative education at Concordia is not to be construed as a placement operation or an inexpensive labour apprenticeship. The work term is an essential part of the student's learning experience and there is to be equitable remuneration paid for work performed. A co-op coordinator or participating faculty member visits the students at their place of work to evaluate the work performance, gauge the learning opportunities, assess the compatibility of student and employer and, if necessary, takes corrective action. The procedures for matching students with employers are managed by the Institute for Co-operative Education. Students must be willing to work anywhere in Canada, and may go abroad for a work term. Students are required to be enrolled in an academic study term during the final term of their co-op program. **It should be noted that the University does not guarantee every student a job.**

The work terms are designated as CWT 100, 200, 300, and 400 (Co-op Work Term I, II, III, and IV respectively). An appropriate letter is added to the course code to identify the student's area of study. These work terms carry no credit value and are used to indicate that the student is on a work term.

Reflective Learning Courses

A core feature of co-operative education is integration: there must be integration between work and classroom learning. Numerous ways exist to foster such integration. Reflective discussion is one technique that can be used in integration sessions to encourage students to analyze, compare, and contrast their work-term experiences. Other reflective learning techniques include assignments, seminar presentations, and the keeping of logs, diaries, observation reports, and portfolios.

The CWT 101, 201, 301, and 401 Reflective Learning courses are 3-credit extension courses to the work terms. These courses are marked on a pass/fail basis. They are above and beyond the credit requirements of the student's program and are not transferable nor are they included in the full- or part-time assessment status.

CWT 101 *Reflective Learning I* (3 credits)

Students are enrolled in this course concurrently with their first work term. This is a forum for critically examining the workplace, for reflecting on personal work-term experiences, for building and testing hypotheses, for disciplined inquiry, and for setting goals. Activities provide opportunities for students to connect their work-term experiences to their related courses.

CWT 201 *Reflective Learning II* (3 credits)

Students are enrolled in this course concurrently with their second work term. Using one or more of the techniques listed in CWT 101, this course expands on students' second work-term experiences in their related field of study to further develop their knowledge and work-related skills.

CWT 301 *Reflective Learning III* (3 credits)

Students are enrolled in this course concurrently with their third work term. Using one or more of the techniques listed in CWT 101, this course expands on students' third work-term experiences in their related field of study to further develop their knowledge and work-related skills.

CWT 401 *Reflective Learning IV* (3 credits)

Students are enrolled in this course concurrently with their fourth work term. Using one or more of the techniques listed in CWT 101, this course expands on students' fourth work-term experiences in their related field of study to further develop their knowledge and work-related skills.

UNDERGRADUATE PROGRAMS**Co-op programs offered in the Faculty of Arts and Science:****Chemistry and Biochemistry Co-op**

Program Director: Dr. Marcus Lawrence, 514-848-2424, ext. 3374

The Chemistry and Biochemistry co-operative program is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry, Biochemistry, Analytical Chemistry.

Students in Chemistry and Biochemistry co-op take the regular academic program; however, in the work terms the employment opportunities range among a wide variety of industrial and government agencies located throughout Canada. Students are encouraged to choose their work-term positions in a way which provides them with experience ranging from basic analysis in industrial processes and environmental control to senior research placements in the laboratories of various employers. Please see §31.050 for specific details concerning the curriculum.

Economics Co-op

Program Director: Dr. Michael Sampson, 514-848-2424, ext. 3939

The Economics co-operative program enables students to complete a BA Honours or Specialization in Economics. The academic content of the Economics co-op program is identical to the regular program; however, the required work terms provide the co-op student with the unique opportunity of experiencing economics in an applied format.

Because of the course choices available, an Economics co-op student is prepared to undertake employment during his or her work terms in a variety of public sectors including provincial and federal government agencies. Private sector positions might include placements in banks, consulting firms, or planning departments in a variety of industries. Please see §31.080 for specific details concerning the curriculum.

Mathematics and Statistics Co-op

Program Director: Dr. Patrice Gaillardetz, 514-848-2424, ext. 3249

The Mathematics and Statistics co-operative program allows students to complete the BA or BSc degrees with Honours or Specialization in Mathematics, Applied Mathematics, Statistics, Actuarial Mathematics, or Actuarial Mathematics/Finance. The academic content of the Mathematics and Statistics co-op programs is identical to the regular programs.

Work terms provide co-op students with the opportunity to gain practical experience with a variety of employers, such as insurance companies, consulting firms, large Canadian corporations, government departments, and research establishments. Please see §31.200 for specific details concerning the curriculum.

Physics Co-op

Program Director: Dr. Sushil K. Misra, 514-848-2424, ext. 3278

The Physics co-operative program is offered to students who are enrolled in the Specialization in Physics. Students in Physics co-op take the regular academic program; however, in the work terms the employment opportunities are from a wide variety of industrial and government agencies located throughout Canada. Students are encouraged to choose their work-term positions in a way which provides them with experience in applied mathematics, computer science, and electronics. Please see §31.230 for specific details concerning the curriculum.

Translation Co-op

Program Director: Dr. Danièle Marcoux, 514-848-2424, ext. 7894

The Translation co-operative program enables students to complete a specialized BA in Translation. The Translation co-op program is identical to the regular program; however, the required work terms provide the co-op students with the unique opportunity

to apply their translation skills in the government and corporate sectors. Work opportunities are found in environments such as government ministries, communication departments, and various organizations such as technical publishers, consultants, advertising agencies, and similar. Please see §31.110 for specific details concerning the curriculum.

Co-op programs offered in the John Molson School of Business:

Accountancy Co-op

Program Director: Tara Ramsaran, 514-848-2424, ext. 2756

The Accountancy co-operative program is available to students who are enrolled in the BComm program and are majoring in Accountancy. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §61.40 for specific details concerning the curriculum.

Business Technology Management (formerly Management Information Systems) Co-op

Program Director: Dr. Raul Valverde, 514-848-2424, ext. 2968

The Business Technology Management co-operative program is available to students who are enrolled in the BComm program and are majoring in Business Technology Management. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §61.50 for specific details concerning the curriculum.

Finance Co-op

Program Director: Jay Mannadiar, 514-848-2424, ext. 2919

The Finance co-operative program is available to students who are enrolled in the BComm program and are majoring in Finance. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. Most of the positions will be in the Montreal area; however, students must be prepared to work in other parts of Canada. Please see §61.70 for specific details concerning the curriculum.

Human Resource Management Co-op

Program Director: Barbara Shapiro, 514-848-2424, ext. 2780

The Human Resource Management co-operative program is available to students who are enrolled in the BComm program and are majoring in Human Resource Management. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §61.90 for specific details concerning the curriculum.

International Business Co-op

Program Director: Dr. Arvind Jain, 514-848-2424, ext. 2939

The International Business co-operative program is available to students who are enrolled in the BComm program and are majoring in International Business. The academic content is very similar to that of the regular program, with specific recommendations for courses designed to improve and enhance the student's quality of work performance. Positions for work terms are not limited to the Montreal area, and may include one work term outside of Canada. Please see §61.80 for specific details concerning the curriculum.

Marketing Co-op

Program Director: Harold J. Simpkins, 514-848-2424, ext. 2955

The Marketing co-operative program is available to students who are enrolled in the BComm program and are majoring in Marketing. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §61.100 for specific details concerning the curriculum.

Supply Chain Operations Management Co-op

Program Director: Dr. Raul Valverde, 514-848-2424, ext. 2968

The Supply Chain Operations Management co-operative program is available to students who are enrolled in the BComm program and are majoring in Supply Chain Operations Management. The academic content is very similar to that of the regular programs, with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §61.50 for specific details concerning the curriculum.

Co-op programs offered in the Faculty of Engineering and Computer Science:

Building and Civil Engineering Co-op

Program Director: Dr. Ciprian Alecsandru, 514-848-2424, ext. 8769

The Building and Civil Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on program and performance requirements.

Electrical and Computer Engineering Co-op

Program Director: Dr. Mustafa K. Mehmet Ali, 514-848-2424, ext. 8896

The Electrical and Computer Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.50 for specific information on program and performance requirements.

Mechanical and Industrial Engineering Co-op

Program Director: Dr. Henry Hong, 514-848-2424, ext. 3154

The Mechanical and Industrial Engineering programs are offered in the co-op format to selected students pursuing undergraduate studies leading to the degree of BEng. The academic content of the co-op program is identical to the regular program but requires one additional course per term. Work-term opportunities range from a variety of industrial, government, and consulting organizations in and out of town. Students are encouraged to choose placement in both public and private sectors, and to mix office experience with site work. Please refer to §71.10.8 and 71.40 for specific information on program and performance requirements.

Software Engineering Co-op

Program Director: Dr. Olga Ormandjieva, 514-848-2424, ext. 7810

The Computer Science and Software Engineering Department offers a co-operative program in Software Engineering. This is a four-year program which will lead to professional engineering qualifications in Software Engineering. The academic content is a mix of Computer Science and Engineering courses and is similar to that of the regular programs. Please see §71.70 for further details.

Computer Science Co-op

Program Director: Dr. Olga Ormandjieva, 514-848-2424, ext. 7810

All options in the Computer Science program are offered in the co-op format to selected students enrolled in the BCompSc program. Co-op students in Computer Science take the regular academic program; however, they have the opportunity through the work terms to experience computer science in the government and corporate sectors. As students near the end of their studies, they are able to choose placements directly related to their option, e.g. information systems, software systems, or computer applications. Please refer to §71.10.8 and 71.70 for specific information on program and performance requirements.

Co-op programs offered in the Faculty of Fine Arts:

Art History Co-op

Program Director: Dr. Elaine Cheasley Paterson, 514-848-2424, ext. 4605

The Art History co-operative program is available to students who are enrolled in the BFA program and are majoring in Art History. The academic content is the same as that of the regular program, with specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §81.50 for specific details concerning the curriculum.

Computation Arts Co-op

Program Director: Jason Lewis, 514-848-2424, ext. 4813

The Computation Arts co-operative program is available to students who are enrolled in the BFA program and are majoring in Computation Arts. The academic content is the same as that of the regular program, with specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §81.90.2 for specific details concerning the curriculum.

Design Co-op

Program Director: Christopher Moore, 514-848-2424, ext. 4256

The Design co-operative program is available to students who are enrolled in the BFA program and are majoring in Design. The academic content is the same as that of the regular program, with specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §81.90.1 for specific details concerning the curriculum.

CO-OP SCHEDULES

Activity flow chart for students undertaking their programs in the co-op format:

FACULTY OF ARTS AND SCIENCE

Bachelor of Arts or Science (Co-operative)

Chemistry and Biochemistry, Mathematics and Statistics, Physics

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Work Term 1
Year 2	Term 3	Work Term 2	Term 4
Year 3	Work Term 3	Term 5	Work Term 4
Year 4	Term 6	Graduate	

Economics

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Work Term 1
Year 2	Term 3	Work Term 2	Term 4
Year 3	Work Term 3	Term 5	Term 6
Year 4	Graduate		

Translation

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Term 3
Year 2	Work Term 1	Term 4	Work Term 2
Year 3	Term 5	Work Term 3	Term 6
Year 4	Graduate		

JOHN MOLSON SCHOOL OF BUSINESS

Bachelor of Commerce (Co-operative)

Accountancy, Business Technology Management (formerly Management Information Systems), Finance, Human Resource Management, International Business, Marketing, Supply Chain Operations Management

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Term 3
Year 2	Work Term 1	Term 4	Work Term 2
Year 3	Term 5	Work Term 3	Term 6
Year 4	Graduate		

FACULTY OF ENGINEERING AND COMPUTER SCIENCE

Bachelor of Engineering (Co-operative)

All Engineering programs except Software

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Term 3
Year 2	Work Term 1	Term 4	Term 5
Year 3	Term 6	Work Term 2	Work Term 3
Year 4	Term 7	Term 8	Graduate

Software Engineering

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Term 3
Year 2	Work Term 1	Term 4	Work Term 2
Year 3	Term 5	Term 6	Work Term 3
Year 4	Term 7	Term 8	Graduate

Bachelor of Computer Science (Co-operative)

All Computer Science programs

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Work Term 1
Year 2	Term 3	Work Term 2	Term 4
Year 3	Work Term 3	Term 5	Term 6
Year 4	Graduate		

FACULTY OF FINE ARTS

Bachelor of Fine Arts (Co-operative)

Art History, Computation Arts, Design (this schedule may differ depending on individual student needs)

	Fall	Winter	Summer
Year 1	Term 1	Term 2	Work Term 1
Year 2	Term 3	Work Term 2	Term 4
Year 3	Work Term 3	Term 5	Term 6
Year 4	Graduate		

NOTE 1: The above activity flow chart is for students admitted into the co-op format in the fall term of the first year of their academic program. However, students may be admitted at the start of the winter term, following their September entry, with special permission. All are required to register as full-time students, and they must plan their studies to give a reasonable division of the total credits required for their degree between the specified number of campus terms. Students eligible to apply for NSERC grants should note that they must take at least 15 credits per term to be considered.

NOTE 2: The work term negotiated with the employer is for a minimum of 12 weeks. Extension beyond this period, to a maximum of 17 weeks, is at the sole discretion of the employer. To complete the requirements of each work term, a student's work performance and work-term report must be assessed as "pass" in accordance with the procedure specified under "Co-op Performance Requirements."

INDUSTRIAL EXPERIENCE

The Industrial Experience (IE) offers undergraduate Engineering and Computer Science students extended work experience in industry in addition to their academic courses. The work experience is normally undertaken after students have completed a minimum of 24 credits and have a minimum of 20 credits left to do before the end of their academic program. Students who have a minimum GPA of 2.3 (cumulative and last annual) are eligible for the program. The IE work term may begin in May or June and must run for a minimum of 12 consecutive weeks. Work during the IE period is full-time, and students are paid by the employer at competitive rates. Following completion of the work experience, students return to the University to complete their degree program of studies. It is not possible to guarantee that all students wishing to obtain an industrial experience will be able to do so.

Students in Engineering programs may do one, two, or three work terms, while students in Computer Science may do one to two work terms. During the work period of the IE, students register in work experience courses (ENGR 107, 207, 307 [see §71.20.8] or COMP 107, 207 [see §71.70.7]) and are considered to be full-time students at the University. Work experience courses are assigned no credits and are graded on a pass/fail basis. All IE students are enrolled in the Reflective Learning courses (ENGR 108, 208, 308 [see §71.60] or COMP 108 or 208 [see §71.70.10]) concurrently with their work term. Reflective Learning courses are 3-credit extension courses that have associated fees and are graded on a pass/fail basis. They are above and beyond the credit requirements of the students' programs and are not transferable nor are they included in the full- or part-time assessment status. These fees are in addition to the co-op fees charged to the IE students.

During the first term following completion of the work experience and return to the University, students must complete the academic requirements of the Industrial Experience program. This normally takes the form of a report to the appropriate academic advisor and/or the Industrial Experience coordinator as part of a graded seminar course.

Detailed information about the Industrial Experience is available from the IE coordinator at the Institute for Co-operative Education.

CONTACTS AT THE INSTITUTE

Director

Gerry Hughes
514-848-2424, ext. 3951

Associate Director

Chen F. Huang
514-848-2424, ext. 3973

Assistant Director, Employer Relations

Alain Villemare
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Coordinator, Administrative Services

Lynn Bergeron
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Co-op Service Assistants

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Samantha Hamer
514-848-2424, ext. 3936

Officer, Communications and Marketing

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Convocation Medals and Prizes

25.1 GOVERNOR GENERAL'S AWARD

25.2 UNIVERSITY AWARDS

25.3 FACULTY AWARDS

25.3.1 Faculty of Arts and Science

25.3.2 John Molson School of Business

25.3.3 Faculty of Engineering and Computer Science

25.3.4 Faculty of Fine Arts

25.4 SPECIAL AWARDS

Section 25

25

CONVOCATION MEDALS AND PRIZES

25.1 GOVERNOR GENERAL'S AWARD

The Governor General's Silver Medal: Conferred by his Excellency, the Governor General of Canada, and awarded to the highest ranking undergraduate student graduating from Concordia University.

25.2 UNIVERSITY AWARDS

The final graduation GPA is used as the basis to determine the highest ranking student.

The Rytza Tobias Memorial Medal: Presented by the Tobias Family, and awarded to the highest ranking student graduating with a BA degree.

The Anne Stokes Medal: Awarded to the highest ranking student graduating with a BEd degree in Teaching English as a Second Language.

The Mappin Medal: Donated by the Mappin Family, and awarded to the highest ranking student graduating with a BSc degree.

The Administration Medal: Awarded to the highest ranking student graduating with a BAdmin degree.

The Commerce Medal: Awarded to the highest ranking student graduating with a BComm degree.

The Computer Science Medal: Awarded to the highest ranking student graduating with a BCompSc degree.

The Chait Medal: Awarded to the highest ranking student graduating with a BEng degree.

The Alfred Pinsky Medal: Awarded to the highest ranking student graduating with a BFA degree.

25.3 FACULTY AWARDS

The prizes listed in this section are awarded to the most outstanding graduating student in a department (or unit). Candidates are nominated by the departments or units for consideration and approved by the appropriate Faculty Council and Senate. The departments or units in making their selection may include, in addition to a high grade point average, other criteria such as number and/or level of the courses taken, outstanding results on a project or essay, or a significant contribution to the extra-curricular life of the department. In the Faculty of Engineering and Computer Science, the GPA calculated using only courses which are part of the degree will be used to determine the prizewinner.

25.3.1 Faculty of Arts and Science

The Biology Prize
The Chemistry Medal
The Classics Book Prize
The John E. O'Brien, s.j., Medal for Communication Studies
The Economics Prize
The Education Book Prize
The Medal for English
Le prix Paul d'Hollander pour les Études françaises
The Exercise Science Plaque
The Bogdan Zaborski Medal in Geography
The Martin Lewis Memorial Book Prize in History
The Robert C. Rae Book Prize in Human Relations
The Interdisciplinary Studies Medal
The Gordon Fisher Prize for Journalism
The Randy B. Swedburg Medal for Leisure Sciences and Therapeutic Recreation
The Liberal Arts College Prize
The Eric O'Connor Mathematics Medal
The Modern Languages and Linguistics Plaque
The W.R. Fraser Medal for Philosophy
The Walter Raudorf Medal for Physics

The Renée Vautelet Prize for Political Science
The J.W. Bridges Medal for Psychology
The Boyd Sinyard Prize for Religion
The Vince Sirois Prize (School of Community and Public Affairs)
The Science College Prize
The Everett C. Hughes Medal for Sociology and Anthropology
The Theological Studies Medal
The Thérèse F. Casgrain Medal for Women's Studies

25.3.2 John Molson School of Business

The Ross Medal for Accountancy
The Decision Sciences and Management Information Systems Medal
The Finance Medal
The International Business Medal
The Management Medal
The Marketing Medal

25.3.3 Faculty of Engineering and Computer Science

The Building Engineering Medal
The Matthew Douglass Medal for Civil Engineering
The Computer Engineering Medal
The Phoivos Ziogas Medal for Electrical Engineering
The Jaan Saber Medal for Industrial Engineering
The Mechanical Engineering Medal
The Software Engineering Medal

25.3.4 Faculty of Fine Arts

The Art Education Prize
The R. Bella Rabinovitch Art History Prize
The Cinema Prize
The Computation Arts Prize
The Contemporary Dance Prize
The Design Prize
The Music Prize
The Yves Gaucher Prize in Studio Arts
The Betty Goodwin Prize in Studio Arts
The Guido Molinari Prize in Studio Arts
The Gabor Szilasi Prize in Studio Arts
The Irene F. Whittome Prize in Studio Arts
The Theatre Prize

25.4 SPECIAL AWARDS (AWARDS ARE GIVEN ONLY WHEN MERITED)

The Concordia Medal: Presented by the Concordia University Alumni Association to an undergraduate graduating student who has displayed distinctive leadership ability through both academic and non-academic achievements and has won the outstanding commendation of his/her fellows and of the faculty.

The First Graduating Class Award: Presented on behalf of the first graduating class of the Faculty of Arts, Science and Commerce of Sir George Williams College, known as the Guinea Pig Club, for the most innovative and new contribution either academic or extra-curricular to University life.

The Malone Medal: Presented in honour of Rev. Patrick G. Malone, s.j., and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the *internal* Concordia community.

The O'Brien Medal: Presented in honour of Dr. J.W. O'Brien and awarded to the undergraduate graduating student whose efforts and dedication best exemplify the values of the University within the larger *external* community.

The Provost's Medal for Outstanding Achievement: Presented by Provost David Graham and awarded to the undergraduate graduating student whose commitment and spirit towards academic excellence, leadership, athleticism, and civic responsibility reflect the values exemplified by Concordia University and the Office of the Provost.

Faculty of Arts and Science

31.001 FACULTY OF ARTS AND SCIENCE	31.180 JOURNALISM
31.002 PROGRAMS AND ADMISSION REQUIREMENTS	LEISURE SCIENCES (<i>See 31.010</i>)
31.003 DEGREE REQUIREMENTS	31.200 MATHEMATICS AND STATISTICS
31.004 GENERAL EDUCATION	31.220 PHILOSOPHY
ADULT EDUCATION (<i>See 31.090.2</i>)	31.230 PHYSICS
31.010 APPLIED HUMAN SCIENCES	31.240 POLITICAL SCIENCE
31.030 BIOLOGY	31.250 PSYCHOLOGY
31.050 CHEMISTRY AND BIOCHEMISTRY	31.270 RELIGION
31.060 CLASSICS, MODERN LANGUAGES AND LINGUISTICS	31.310 SOCIOLOGY AND ANTHROPOLOGY
31.070 COMMUNICATION STUDIES	SOUTHERN ASIA STUDIES (<i>See 31.270</i>)
31.080 ECONOMICS	TEACHING OF ENGLISH AS A SECOND LANGUAGE (<i>See 31.090.1</i>)
31.090 EDUCATION	31.330 THEOLOGICAL STUDIES
31.100 ENGLISH	URBAN STUDIES (<i>See 31.130.1</i>)
ENGLISH AS A SECOND LANGUAGE (<i>See 31.090.1</i>)	WOMEN'S STUDIES (<i>See 31.560</i>)
31.110 ÉTUDES FRANÇAISES	31.400 COMPUTER SCIENCE (<i>Minor</i>)
31.120 EXERCISE SCIENCE	31.500 COLLEGES, INSTITUTES AND SCHOOLS
31.130 GEOGRAPHY, PLANNING AND ENVIRONMENT	31.515 CO-OPERATIVE EDUCATION
31.160 HISTORY	31.520 LIBERAL ARTS COLLEGE
INTERDISCIPLINARY ELECTIVE GROUPS (<i>See 31.170</i>)	31.525 LOYOLA COLLEGE FOR DIVERSITY AND SUSTAINABILITY
31.170 INTERDISCIPLINARY STUDIES	31.530 SCHOOL OF CANADIAN IRISH STUDIES
INTERDISCIPLINARY STUDIES IN SEXUALITY (<i>See 31.170</i>)	31.540 SCHOOL OF COMMUNITY AND PUBLIC AFFAIRS
	31.550 SCIENCE COLLEGE
	31.560 SIMONE DE BEAUVOIR INSTITUTE and WOMEN'S STUDIES

Section 31

31.001

FACULTY OF ARTS AND SCIENCE

Dean

BRIAN LEWIS, PhD Iowa

Associate Dean, Academic Programs

JOANNE LOCKE, MLS McG.

Associate Dean, Research and Graduate Studies

GRANT BROWN, PhD Nfld.

Associate Dean, Student Academic Services

M. CATHERINE BOLTON, PhD McM.

Associate Dean, Facilities

PETER MORDEN, PhD Wat.

Associate Dean, Faculty Affairs

JORGEN HANSEN, PhD Gothenburg

Location

Loyola Campus

Administration Building, Room: AD 229

514-848-2424, ext. 2080

Sir George Williams Campus

Hall Building, Room: H 541-4

514-848-2424, ext. 2080

Structure

The Faculty of Arts and Science, comprised of the former Loyola Faculty of Arts and Science, the former Sir George Williams Faculty of Arts, and the former Sir George Williams Faculty of Science, was brought into being on July 1, 1977.

For administrative purposes, the Faculty consists of departments, programs, colleges, institutes, and schools.

The departments and other units of which the Faculty is comprised are as follows:

Departments

Applied Human Sciences

Biology

Chemistry and Biochemistry

Classics, Modern Languages and Linguistics

Communication Studies

Economics

Education

English

Études françaises

Exercise Science

Geography, Planning and Environment

History

Journalism

Mathematics and Statistics

Philosophy

Physics

Political Science

Psychology

Religion

Sociology and Anthropology

Theological Studies

Colleges
Liberal Arts College
Loyola College for Diversity and Sustainability
School of Canadian Irish Studies
School of Community and Public Affairs
Science College
Simone de Beauvoir Institute

Programs
Certificate in Arts and Science
Individually Structured Program

Objectives

The Faculty of Arts and Science is committed to responsible and innovative leadership in developing and disseminating knowledge and values, and encouraging constructive social criticism. The Faculty achieves these objectives through inclusive and accessible academic programs which stress a broad-based, interdisciplinary approach to learning. We are dedicated to superior teaching and research supported by excellence in scholarship and creative activity, and a tradition of service to the community. The Faculty of Arts and Science serves many interdependent academic communities in an urban environment where students and faculty can pursue their shared commitment to lifelong learning.

Studies in Arts and Science

The Faculty of Arts and Science encourages all students to explore beyond the boundaries of their programs of concentration. This is facilitated by the program structure and graduation requirements of the undergraduate degrees (see §31.002 and 31.003). Undergraduate degrees normally require 90 credits of course work, consisting of at least one program of concentration (major at 36 to 48 credits; specialization or honours at 60 or more credits). The balance of the degree requirements may be made up of one or more minors (24 to 30 credits), one or more elective groups (15 or 18 credits), or by courses selected from a broad spectrum of disciplines. Students are required to complete at least 24 credits outside the main area of concentration. Credits earned to meet the General Education requirement (see §31.004) may also be counted toward this 24-credit requirement.

Most major programs are relatively short, allowing maximal development of interests outside the area of concentration. Two areas of concentration can be combined in a double major. Even longer programs (specialization and honours) allow students to diversify their studies for up to one third of their degree requirements.

Program structures thus permit students to obtain a judicious balance between concentrated study and exploration of broader interests. Department and Faculty advisors are available to help students develop a plan of study which accommodates their personal interests and satisfies degree requirements.

Programs of concentration and related minors are published in the Calendar entries for each of the disciplines in the Faculty (§31.010 onward). To facilitate innovative exploration outside these standard disciplines, the Faculty offers many alternatives. First, the University has established six Colleges (§31.500 onward) which foster various philosophies and methods of education on an intimate scale. Second, it has created majors which cross disciplinary boundaries (Southern Asia Studies and Women's Studies). In addition, selected students may create their own Individually Structured Program (§31.170) under the direction of the Faculty advisor. Finally, the Faculty offers cross-disciplinary minors (for example, Canadian Irish Studies, Southern Asia Studies, and Women's Studies) and a number of Interdisciplinary courses (§31.170) which may be chosen as electives in any program.

A good education — balancing the development of expert knowledge in a narrow domain with broader academic experience — can be obtained in the Faculty of Arts and Science. The programs outlined are best considered as models of what can be planned by imaginative students and their academic advisors.

31.002 PROGRAMS AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13.

Specific requirements for admission to the various programs leading to the BA, BEd, and BSc degrees, and to certificates, are set out in the first column of the following listings. They refer to the table of Cegep pre-Arts and pre-Science profiles defined below. Students lacking one or more of these prerequisites may be admitted, but must include the designated prerequisites among the first 30 credits of their undergraduate program. In certain cases, the prerequisites must be taken in addition to the undergraduate program.

Profile	Requirements
0.00	Diploma of Collegial Studies (DEC — Diplôme d'études collégiales).
0.72	DEC or equivalent and appropriate teaching licence.
0.80	Full-time teaching position with an educational institution recognized by the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) and a Provisional Teaching Authorization from the MESRST.
3.14	Biology 301, 401, 911, 921 or 101-NYA.

- 4.03 Social Science DEC plus Mathematics 300 and Biology 921 (Social Science DEC includes Introductory Psychology).
- 4.10 DEC in Humanities or equivalent. Any other DEC including courses in Psychology and Quantitative Methods or its equivalent.
- 5.00 Natural Science DEC.
- 6.00 DEC intégré en sciences, lettres et arts.
- 10.1 Mathematics 337 or 103 and 307 or 201-NYA; Biology 301, 401, 911, 921 or 101-NYA; Psychology 101 or 102.
- 10.5 Two Cegep courses or equivalent in the language to be studied. If these courses have not been available in the Cegep attended, the student may be required to complete them at the university level.
- 10.9 Mathematics 103 or 201-NYA and 203 or 201-NYB; Physics 101 or 203-NYA and 201 or 203-NYB and 301 or 203-NYC; Chemistry 101 or 202-NYA and 201 or 202-NYB; Biology 301 or 101-NYA.
- 10.10 Mathematics 103 or 201-NYA and 203 or 201-NYB and 105 or 201-NYC; Physics 101 or 203-NYA and 201 or 203-NYB and 301 or 203-NYC; Chemistry 101 or 202-NYA and 201 or 202-NYB; Biology 301 or 101-NYA.
- 10.12 Mathematics 103 or 201-NYA and 203 or 201-NYB and 105 or 201-NYC.
- 10.13 There are no particular requirements for graduates of an anglophone Cegep other than the DEC. Graduates of a francophone Cegep must hold a DEC with an advanced course in English or have an equivalent background in English.
- A: Interview
- E: Essay
- G: Letter of intent
- K: Submission of a portfolio of representative work
- N: English proficiency test/Placement test
- P: Competency in written and oral French, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
- Q: Competency in written and oral English, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.
- +: Two letters of reference; Early Childhood and Elementary Education and Teaching of English as a Second Language require three letters of reference.

Program titles refer to honours, specialization and major components where these exist. Full information about the programs offered under each title (including combinations with programs in other disciplines) is to be found in the section of the Calendar specified in the third column below.

BA, BSc, BEd

Profile	Program	Calendar Section
0.00	Adult Education	31.090.2
0.00	Anthropology	31.310
0.00	Anthropology and Sociology	31.310
10.9/5.00/6.00	Biochemistry	31.050
10.9/5.00/6.00	Biology	31.030
10.9/5.00/6.00	Cell and Molecular Biology	31.030
0.00	Canadian Irish Studies	31.530
0.00	Certificate in Arts and Science	31.170
10.9/5.00/6.00	Chemistry	31.050
0.00	Child Studies	31.090
0.00	Classics	31.060
0.00A,E,G,K,+	Communication Studies	31.070
0.00A,E,G,+	Communication and Cultural Studies	31.070
0.00A,P,Q	Community, Public Affairs and Policy Studies	31.540
0.00G	Community Service	31.010

Profile	Program	Calendar Section
0.00G,K	Creative Writing (see also English and Creative Writing)	31.100
0.00A+	Early Childhood and Elementary Education	31.090
10.9/5.00/6.00	Ecology	31.030
0.00	Economics	31.080
0.00	Education: Adult Education	31.090.2
	Education (see Child Studies; Early Childhood and Elementary Education; Teaching of English as a Second Language)	
0.00	English (see also Creative Writing; Professional Writing)	31.100
0.00G,K	English and Creative Writing	31.100
0.00	English and History	31.100, 31.160
0.00	English Literature	31.100
10.5	Études françaises (Spécialisation)	31.110
	Études françaises	31.110
10.5	Option: Langue ou littératures de langue française	
10.5	Option: Rédaction professionnelle	
10.5	Option: Traduction	
10.5G	Spécialisation en traduction	
0.00	Langue française (Mineure et certificat)	
10.5	Littératures de langue française (Mineure)	
10.9/5.00/6.00	Exercise Science	31.120
10.9/5.00/6.00	Exercise Science (Clinical Exercise Physiology, Athletic Therapy)	31.120
0.00G	Family Life Education	31.010
0.00	First Peoples Studies	31.540
	French Studies — see Études françaises	
0.00	Geography, Planning and Environment (BA), Human Environment	31.130
10.9/5.00/6.00	Geography, Planning and Environment (BSc), Environmental Geography	31.130
10.9/5.00/6.00	Geography, Planning and Environment (BSc), Environmental Science	31.130
0.00	German	31.060
0.00	History	31.160
0.00	History and English	31.160, 31.100
0.00G	Human Relations	31.010
Appropriate	Interdisciplinary Studies — Individually Structured Program	31.170
0.00	Interdisciplinary Studies in Sexuality	31.170
0.00	Italian	31.060
0.00G,Q	Journalism	31.180
0.00,G ^{Honours}	Judaic Studies	31.270
0.00G	Leisure Sciences	31.010
0.00	Linguistics	31.060
10.12/6.00	Mathematics and Statistics (BA)	31.200
10.10/5.00/6.00	Mathematics and Statistics (BSc)	31.200
10.12/6.00	Mathematics (Actuarial — BA)	31.200
10.10/5.00/6.00	Mathematics (Actuarial — BSc)	31.200
10.12/6.00G	Mathematics (Actuarial Mathematics/Finance — BA)	31.200
10.10/5.00/6.00G	Mathematics (Actuarial Mathematics/Finance — BSc)	31.200
10.12/6.00	Mathematics (Computational Finance — BA)	31.200
10.10/5.00/6.00	Mathematics (Computational Finance — BSc)	31.200
10.12/6.00	Mathematics (Pure and Applied — BA)	31.200
10.10/5.00/6.00	Mathematics (Pure and Applied — BSc)	31.200
0.00	Pastoral Ministry (Cert. only)	31.330
0.00	Philosophy	31.220
10.9/5.00/6.00	Physics	31.230
0.00	Political Science	31.240
0.00N	Professional Writing	31.100
10.1/4.03/6.00/ 3.14 + 4.10	Psychology (BA)	31.250
5.00/6.00/10.9	Psychology (BSc)	31.250
5.00/6.00/10.9	Psychology (Behavioural Neuroscience Option)	31.250
0.00,G ^{Honours}	Religion (see also Judaic Studies)	31.270
0.00	Sociology	31.310
0.00	Southern Asia Studies	31.270

Profile	Program	Calendar Section
0.00	Spanish	31.060
10.12/6.00	Statistics (BA)	31.200
10.10/5.00/6.00	Statistics (BSc)	31.200
10.13	Teaching of English as a Second Language	
A,G,P,Q,+		31.090.1
0.72	Teaching of English as a Second Language	
G,Q,+	(Certificate)	31.090.1
0.00	Theological Studies (see also Pastoral Ministry)	31.330
3.14G	Therapeutic Recreation	31.010
0.00	Urban Planning	31.130.1
0.00	Urban Studies	31.130.1
0.00A,G ^{Honours}	Western Society and Culture	31.520
0.00	Women's Studies	31.560

Mature Student Entry

Concordia University has a tradition of concern for the education of Mature students; it has always sought to assist students of 21 and over to undertake undergraduate studies. Mature students are supported in their return to formal studies by committed staff members in the Student Transition Centre of the School of Extended Learning. The staff of the Student Transition Centre provide guidance and encouragement to all Mature Entry students as they begin the challenging journey of plunging into courses and programs in a very large urban university after what could have been years away from classes and studying. Mature students who are seeking first-year academic counselling and advice on returning to university studies are encouraged to visit the Student Transition Centre's website (stc.concordia.ca) for further information.

Extended Credit Program

Students admitted to BA and BEd Extended Credit Programs are required to complete an additional 30 credits for the degree and must include the following 30 credits:

- 30 elective credits, of which a maximum of 12 may be outside the Faculty of Arts and Science. Certain departments in the Faculty have specific requirements. Students intending to follow programs of concentration within these departments must include the specified components as part of their program.

BA Mathematics: 9 credits in Mathematics — 203³, 204³, 205^{3*}

**Students not having MATH 202³, or the equivalent, must take it in place of one of their elective courses.*

BA Psychology: 3 credits in Mathematics
3 credits in Biology
6 credits in Psychology

BA Therapeutic Recreation: BIOL 200³ or 201³ or 202³, or equivalent

Students admitted to the BSc Extended Credit Program are required to complete an additional 30 credits for the BSc degree and must include the following 30 credits:

- 6 credits in Chemistry 205³, 206³
- 6 credits in Mathematics 203³, 205^{3*}
- 12 credits in Physics 204³, 205³, 206³, 224¹, 225¹, 226¹
- 3 credits in Biology 201³
- 3 credits in Mathematics 204³ for students intending to enter programs of concentration in Mathematics or Physics;**
or electives for all other students

**Students not having MATH 201³, or the equivalent, must take it in place of one of their elective courses.*

***Students not having MATH 202³, or the equivalent, must take it in place of one of their elective courses.*

NOTE: Students in the BA, BEd or BSc Extended Credit Program may not count towards their programs of concentration courses taken as part of the first 30 credits.

31.003 DEGREE REQUIREMENTS

In accordance with the recommendations of the Council of Universities of Quebec, the credit base takes into account the total activity of the student. A student preparing for the BA, BEd, or BSc degree takes a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours spread across lectures, conferences, tutorials, laboratories, studio or practice periods, tests, examinations, and personal work.

Since the Cegep programs are designed to give all students the opportunity to explore different fields and thus acquire a broad general basis for further study, the undergraduate programs in the Faculty of Arts and Science require some degree of concentration in specific areas. Detailed statements about these programs are made under the appropriate disciplinary headings in the sections

of the Calendar that follow this general account of degree requirements. They represent four main forms of concentration: the *minor*, the *major*, the *specialization*, and *honours*; and a fifth form, the *certificate*. The University's formal definitions of these kinds of programs are set out in §16.2.3; for the convenience of students in Arts and Science, those definitions as they are construed in the Faculty are briefly repeated below.

The *minor* is a program consisting of a *minimum* of 24 specified credits in a single discipline and professing to give a basic introduction to the methodology and key concepts of that discipline. A minor cannot in and by itself provide the concentration required of a candidate for a degree and is therefore always taken in combination with another program. In addition to the interdisciplinary and disciplinary minors available in Arts and Science, students may register with approval for selected minors in other Faculties. Available Arts and Science interdisciplinary minors are listed in §31.170. Disciplinary minors are indicated in the Calendar entry of each department or college.

The Faculty of Arts and Science and the John Molson School of Business:

With the approval of the John Molson School of Business, Arts and Science students may take a Minor in Business Studies (see §61.140).

The Faculty of Arts and Science and the Faculty of Engineering and Computer Science:

With the approval of the Faculty of Engineering and Computer Science, Arts and Science students may take a Minor in Computer Science (see §71.70.5).

All minors in the **Faculty of Fine Arts** are open to suitably qualified students.

The *major* consists of a *minimum* of 36 specified credits taken in an approved sequence of courses. Normally within a major program not more than 36 credits are required from a single discipline or department. In certain programs, however, additional credits are required in cognate disciplines and departments. The major provides a solid grounding in the academic knowledge comprehended within the field of concentration. To enter and remain in it, a student normally does not have to meet a special performance requirement; see, however, Western Society and Culture §31.520. Students with appropriate admission requirements, normally after completion of 24 credits, may request permission to be admitted to a second program of concentration in the Faculty, normally a major. Exceptionally, students may complete a second major in the Faculty of Fine Arts with permission of both Faculties. Students may apply to add a major program normally offered as part of a BA degree to a BSc degree or BEd degree or vice-versa. Attainment of acceptable GPA and satisfactory academic standing are required. The Faculty of Arts and Science will consider favourably such requests subject to admission quotas and the student having the appropriate prerequisite and admission profile (see §31.002). The student record and official transcript indicate all programs of concentration. Specific courses can only be used to fulfill the requirements of one program.

Students completing the requirements of a BA, BEd, BSc, and/or BFA will elect one degree for graduation.

The *specialization* consists of a *minimum* of 60 specified credits, normally not more than 54 credits of which are mandated from a single discipline or department. A specialization provides a comprehensive education in the field of concentration, but to enter and remain in it, a student normally does not have to meet a special performance requirement unless otherwise indicated in the program. Students interested in subsequent "classification" by the Government of Quebec may be advised to follow a specialization or an honours program. Second programs of concentration (minor or major) may be combined with a specialization program according to regulations described above for those programs.

The *honours* program consists of a *minimum* of 60 specified credits taken in an approved sequence of courses. Normally within an honours program not more than 60 credits are mandated from a single discipline or department in the Arts and 72 credits in the Sciences. Additional credits may be required in cognate disciplines and departments. Superior academic performance is required for admission to and continuation in the honours program, the precise level of such performance being determined by Senate. See §16.2.3 and *Faculty Honours Regulations* set out below for matters governing honours programs at Concordia. An honours degree or equivalent, because it testifies to a student's comprehensive education in a particular field, intellectual commitment to that field, and achievement of a high level of academic performance, has traditionally been required of entrants to postgraduate programs.

Graduation Requirements

1. A candidate for graduation must have successfully completed a program of concentration in the form of an *honours*, *specialization*, or *major* program.
2. A candidate for graduation must have successfully completed at least 24 credits outside the single discipline or department from which the degree concentration has been chosen. Within every block of 30 credits taken towards the degree, a student will normally choose no more than 24 credits from any one discipline or department.
3. A candidate for graduation must have successfully completed at least 18 credits from courses in Arts and Science in every block of 30 credits taken towards the degree.
4. A candidate for the BA degree must have qualified for admission to, and successfully completed, a program leading to that degree. Specific admission requirements, expressed as Cegep pre-Arts profiles, are given in §31.002. Students wishing to transfer out of one degree program into another must satisfy the admission requirements of the program they seek to enter.
5. Students enrolled in a regular degree program or an Extended Credit degree program in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.
6. A candidate for the BSc degree must have qualified for admission to, and successfully completed, a program leading to that degree. Specific admission requirements, expressed as Cegep pre-Science profiles, are given in §31.002. Students wishing to transfer out of one degree program into another must satisfy the admission requirements of the program they seek to enter.

7. A candidate for the BEd degree must have qualified for admission to, and successfully completed, the program leading to that degree. The admission and degree requirements are set out in §31.090.1.
8. In general, the credits obtained for any course may not be used to satisfy the requirements of more than one program. Students first registered in certain certificate programs may however apply credits obtained towards the certificate to a degree program.
9. Independent students will be permitted to apply *no more* than 30 credits obtained as an Independent student towards any Arts and Science Faculty degree program.
10. Those students entering the Faculty of Arts and Science as degree students beginning in the academic year 2002-03 must fulfill the General Education requirement outlined in §31.004.

Supplemental Examinations (Arts and Science)

Supplemental examinations shall be offered only when, as a condition for passing the course, it is required that a student pass the final examination regardless of its weighting; or where the final examination contributes 50% or more of the final grade. A student failing a course which comprises entirely, or in part, a laboratory or similar practicum, may not be eligible to write a supplemental examination.

All courses which a student fails and for which there is no supplemental examination shall be graded "FNS" or "R."

A failed student (see §16.3.11 V) may not write supplemental examinations.

Honours Programs

The Faculty of Arts and Science has programs leading to an honours concentration in certain selected fields. To enter an honours program, students may apply either for direct entry on admission or, if already admitted to a program in the Faculty of Arts and Science, to the departmental honours advisor. The Department will notify the Office of the Registrar of the acceptance.

Honours Regulations (Faculty Regulations) see also §16.2.3

In order to qualify for an honours program, a student must comply with the regulations set forth below.

1. An honours student must meet the general program requirements, as well as the specific requirements for an honours program. A student must complete a minimum of 30 credits in the courses from the honours component of the program at this University to receive a degree with honours. In certain cases, these 30 credits may include some specific courses for which transfer credit may not be awarded.
2. Students who through their past studies have demonstrated a high level of performance may apply for direct entry to an honours program on admission. Information specific to the academic unit may be found in the Undergraduate Application for Admission.
3. Students already admitted to a program at Concordia University may apply for entry into an honours program with a minimum cumulative GPA of 3.30 (B+). It is normally advisable that students have completed 30 Concordia credits in their program before applying for admission to the honours program. Averages are calculated on Concordia courses only.
4. All students must maintain a minimum cumulative GPA of 3.30 as well as a minimum annual GPA of 3.30 within the honours program. The minimum acceptable grade in any course is normally "C."
5. Students who are withdrawn from the honours program may proceed in the corresponding specialization or major program. Reinstatement in the honours program is possible only by appeal to the Faculty Honours Committee.
6. A student is allowed to qualify for only one honours degree in either a single or combined honours program. A student may qualify for a minor or major program in addition to an honours program. In general, the credits obtained for a particular course may be used to satisfy the requirements of only one program.

Students may appeal the determination of their status or interpretation of requirements in the honours program. Such appeals should be addressed to the Associate Dean, Student Academic Services. The Faculty of Arts and Science has an Honours Committee made up as follows: three faculty members; one undergraduate student member; one Student Academic Services counsellor (non-voting); one representative of the Office of the Registrar (non-voting); and the Associate Dean, Student Academic Services, who chairs the Honours Committee.

The Faculty Honours Committee considers applications from departmental honours advisors submitted on behalf of the students for exceptions to the honours regulations. It also adjudicates disputes between students and departments concerning honours programs. Since the Faculty Honours Committee cannot hear appeals contesting its own judgments, students and departments who wish to appeal a decision of the Faculty Honours Committee should address this appeal to the Dean of the Faculty.

31.003.1 Academic Performance Regulations

Objectives

The objectives of these regulations are to ensure that the Faculty can certify that all of its graduates have achieved an acceptable level of scholarship.

Annual Weighted Grade Point Average (WGPA)* Requirements and Consequences

**See §16.3.11 for definition of annual WGPA.*

Acceptable standing requires that a student obtain an annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing may continue their programs of study, following the advice of their academic departments.

Conditional standing results when a student obtains an annual WGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments. Students in conditional standing may not write supplemental examinations. Students in conditional standing will not be permitted to register for further study until their program has been approved by the appropriate advisor in their department. They must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an annual WGPA of less than 1.50, or conditional standing in two consecutive periods of assessment.

Failed students may not write supplemental examinations.

Failed students are required to withdraw from their program. Students who are in failed standing for a second time will be dismissed from the University. In subsequent years, should they wish to return to University studies, they must contact the Office of the Registrar for information concerning conditions and procedures for seeking readmission. Decisions of the relevant authority in the Faculty to which application is made are final.

Failed students who are not dismissed may apply for readmission through the Dean's Office of the Faculty to which they wish to be readmitted. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

Graduation Requirements

Students must satisfy all course requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00.

The standings of potential graduates who have attempted fewer than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options:

a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing;
or

b) register for fewer than 12 additional credits.

In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period.

For both option a) and option b), the additional courses taken must be approved by the appropriate member of the Dean's Office, in consultation with the student's department where necessary.

Dean's Office

Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Associate Dean, Student Academic Services, or delegate.

31.003.2 Registration Regulations

Lapsed Program

Students enrolled in an honours, specialization, or major program in the Faculty of Arts and Science who have not registered for a course for nine consecutive terms or more will have a lapsed notation entered on their student record. Lapsed students must meet with the appropriate advisor in order to continue in their program and to be made aware of possible program modifications.

31.003.3 In Progress "IP" Notations

Students should refer to §16.3.7 for Procedures and Regulations.

The In Progress "IP" notation is reserved for the following courses offered by the Faculty of Arts and Science:

ACTU	492 ³	Reading Course in Actuarial Mathematics
ACTU	493 ⁶	Honours Project in Actuarial Mathematics
AHSC	435 ³	Fieldwork Practice
AHSC	437 ⁶	Internship in Leisure Sciences
AHSC	438 ⁹	Internship in Therapeutic Recreation
AHSC	439 ⁶	Internship in Human Relations
ANTH	315 ⁶	Field Research
ANTH	495 ⁶	Honours Essay
BIOL	490 ⁶	Independent Study
CATA	390 ³	Athletic Therapy Field Internship
CATA	480 ³	Athletic Therapy Clinical Internship
CHEM	419 ⁶	Independent Study and Practicum
CHEM	450 ⁶	Research Project and Thesis
COMS	394 ³	Communication Studies Apprenticeship I
COMS	395 ³	Communication Studies Apprenticeship II

COMS 496 ³	Directed Study I
COMS 497 ³	Directed Study II
ENGL 474 ³	Honours Essay
ENGL 480 ³	Independent Studies
EXCI 383 ³	Clinical Exercise Physiology Internship I
EXCI 483 ³	Clinical Exercise Physiology Internship II
FTRA 420 ⁶	Stage de formation : de l'anglais au français
FTRA 421 ⁶	Stage de formation : du français à l'anglais
FTRA 422 ³	Stage de formation : de l'anglais au français I
FTRA 423 ³	Stage de formation : du français à l'anglais I
FTRA 424 ³	Stage de formation : de l'anglais au français II
FTRA 425 ³	Stage de formation : du français à l'anglais II
GEOG 490 ³	Internship in Geography
GEOG 491 ⁶	Honours Essay
HIST 304 ³	Tutorial Preparation for the Honours Essay
HIST 493 ⁶	Honours Essay Tutorial
JOUR 450 ³	Independent Study
JOUR 451 ³	Journalism Practicum
MAST 398 ³	Reading Course in Mathematics and Statistics
MATH 495 ³	Reading Course in Pure and Applied Mathematics
MATH 496 ⁶	Honours Project in Pure and Applied Mathematics
PHYS 497 ³	Specialization Research Project
POLI 495 ⁶	Honours Thesis
POLI 497 ³	Internship
PSYC 311 ³	Research Methods and Designs II
PSYC 387 ³	Directed Research in Psychology
PSYC 485 ⁶	Specialization Project
PSYC 495 ⁶	Honours Thesis
RELI 410 ⁶	Honours Thesis
RELI 496 ³	Independent Studies in Religion
SCOL 290 ³	Directed and Independent Study I
SCOL 390 ³	Directed and Independent Study II
SCOL 490 ⁶	Directed and Independent Study III
SCPA 411 ³	Internship
SOCI 409 ⁶	Honours Seminar
SOCI 415 ⁶	Field Research
STAT 498 ³	Reading Course in Statistics
STAT 499 ⁶	Honours Project in Statistics
URBS 483 ³	Directed Studies/Practicum in Urban Planning I
URBS 484 ³	Directed Studies/Practicum in Urban Planning II
URBS 491 ⁶	Honours Thesis or Project
WSDB 496 ⁶	Directed Research

31.004 GENERAL EDUCATION

Coordinator

JOANNE LOCKE, MLS McG., Associate Dean, Academic Programs

Location

Loyola Campus

Faculty of Arts and Science

7141 Sherbrooke St. W.

514-848-2424, ext. 2088

Email: gened@alcor.concordia.ca

Objectives

An education for life requires the ability to read, write, speak, reason, compute, and listen effectively. This is true for all students, whether they are in the social sciences, humanities, natural sciences, or any other Faculty in the University. The General Education requirement is meant to provide breadth to the student's program of study.

Regulations

A candidate for graduation must satisfy the Arts and Science General Education requirement by successfully completing a minimum of six credits from course offerings outside the candidate's disciplinary sector.

The disciplinary sectors comprising the Faculty of Arts and Science are Humanities, Social Science, and Science. The academic units within each sector are as follows:

- HUMANITIES:** Canadian Irish Studies, Classics, Modern Languages and Linguistics; Communication Studies; English; Études françaises; History; Journalism; Liberal Arts College; Loyola College for Diversity and Sustainability; Philosophy; Theological Studies
- SOCIAL SCIENCE:** Applied Human Sciences; Economics; Education; Geography, Planning and Environment; Political Science; Religion; School of Community and Public Affairs; Simone de Beauvoir Institute; Sociology and Anthropology
- SCIENCE:** Biology; Chemistry/Biochemistry; Exercise Science; Mathematics and Statistics; Physics; Psychology; Science College

Courses falling under the administrative umbrella of Interdisciplinary Studies are considered for General Education requirement purposes to fall within the Social Sciences.

Students may also count courses offered by the John Molson School of Business, the Faculty of Engineering and Computer Science, and the Faculty of Fine Arts toward their General Education requirement.

Students enrolled in two areas of concentration which are both within the same disciplinary sector are required to take six credits outside of the sector. For example, students enrolled in a BA Major in History and a BA Major in Theological Studies, both of which fall within the Humanities, must fulfill the requirement by successfully completing either six credits from the Social Science or Science sector, or three credits from the Social Science sector and three credits from the Science sector, or six credits from outside the Faculty of Arts and Science.

Students enrolled in two areas of concentration drawn from different disciplinary sectors will be considered as having satisfied the General Education requirement. For example, students enrolled in a BA Major in Sociology (Social Science) and a BA Major in English (Humanities) will be considered as having satisfied the General Education requirement.

Students enrolled in an undergraduate certificate program are exempt from the General Education requirement as are students pursuing a second or subsequent undergraduate degree.

ESL courses or introductory English language courses are not considered as substitutions for this requirement.

31.010

APPLIED HUMAN SCIENCES

Faculty

Acting Chair

DONALD W. DE GUERRE, PhD *Fielding Inst.*, Associate Professor

Professors

JAMES F. GAVIN, PhD *N.Y.*

RAYE KASS, PhD *Tor.*

BLUMA LITNER, PhD *Tor.*

VARDA MANN-FEDER, DEd *McG.*

Associate Professors

FERN DELAMERE, PhD *Wat.*

GILBERT ÉMOND, PhD *U.Q.A.M.*

WARREN LINDS, PhD *Br.Col.*

PETER MORDEN, PhD *Wat.*

LISA OSTIGUY, PhD *Iowa*

ROSEMARY REILLY, PhD *McG.*

HILARY ROSE, PhD *Ga.*

Assistant Professors

NATASHA BLANCHET-COHEN, PhD *Vic.B.C.*

JAMES CONKLIN, PhD *C'dia.*

SHANNON HEBBLETHWAITE, PhD *Guelph*

PATTI RANAHAN, PhD *Vic.B.C.*

FELICE YUEN, PhD *Wat.*

Senior Lecturers

STEVEN HENLE, PhD *N.Y.*

ROBERT HOPP, MA *Iowa*

Lecturer

NARUMI TANIGUCHI, PhD *Texas Tech.*

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

7141 Sherbrooke St. W., Room: VE 223

514-848-2424, ext. 3330 or 2260

Department Objectives

The strategic objective of the Department of Applied Human Sciences is to improve quality of life and well-being. This is accomplished through the integration of theory and practice to promote effective practitioner skill. The Department of Applied Human Sciences is an interdisciplinary and applied academic unit which generates knowledge and provides practice-based education in human relations, leisure sciences, therapeutic recreation, human systems intervention, family life education and community service. Involvement in practical contexts beyond the University provides an important link with members of the community, thereby offering a genuine environment for the exchange of knowledge and expertise.

Programs

Students in Human Relations, Leisure Sciences, and Therapeutic Recreation are required to complete the appropriate entrance profiles. The entrance profile is 0.00G for Human Relations; 0.00G for Leisure Sciences; and 3.14G for Therapeutic Recreation. Students are responsible for satisfying their particular degree requirements. The superscript indicates credit value.

60 BA Specialization in Human Relations

- 15 AHSC 220³, 230³, 232³, 260³, 270³
18 AHSC 311³, 330⁶, 370³, 380³, 382³
6 AHSC 439⁶
6 Chosen from AHSC 423³ and 425³ or 443³ and 445³
15 Elective credits, with at least three credits at the 400 level, chosen from AHSC 225³, 312³, 313³, 314³, 315³, 316³, 319³, 322³, 335³, 351⁶, 375³, 460⁶, 465³, 470³

60 BA Specialization in Leisure Sciences

- 12 AHSC 220³, 230³, 241³, 260³
15 AHSC 350³, 361³, 371³, 380³, 382³
12 AHSC 427³, 431³, 437⁶
9 AHSC 215³, 285³; PHIL 255³
12 Elective credits chosen from either Recreation Programming or Recreation Administration
Recreation Programming
With at least three credits at the 400 level, chosen from AHSC 281³, 310³, 311³, 323³, 333³, 340³, 360³, 421³, 422³, 444³, 450³, 460⁶, 490³, 491³
Recreation Administration
With at least three credits at the 300 level, chosen from MANA 201³, 202³, 298³, 299³, 300³, 343³, 362³

60 BA Specialization in Therapeutic Recreation

- 15 AHSC 220³, 230³, 241³, 260³, 281³
21 AHSC 350³, 361³, 380³, 381³, 382³, 383³, 384³
9 AHSC 427³, 432³, 450³
9 AHSC 438⁹
6 AHSC 215³; PHIL 255³

42 BA Major in Human Relations

- 15 AHSC 220³, 230³, 232³, 260³, 270³
9 AHSC 311³, 330⁶
3 AHSC 435³
3 Chosen from AHSC 423³, 443³
12 Elective credits, with at least three credits at the 400 level, chosen from AHSC 225³, 312³, 313³, 314³, 315³, 316³, 319³, 322³, 335³, 351⁶, 375³, 425³, 445³, 460⁶, 465³, 470³

42 BA Major in Leisure Sciences

- 24 AHSC 220³, 230³, 241³, 260³, 350³, 361³, 371³, 427³
9 AHSC 215³, 285³; PHIL 255³
9 Elective credits, with at least three credits at the 400 level, chosen from AHSC 281³, 310³, 311³, 323³, 333³, 340³, 360³, 421³, 422³, 444³, 450³, 460⁶

30 Minor in Human Relations

- 12 AHSC 220³, 230³, 232³, 260³
6 AHSC 330⁶
12 Elective credits chosen from AHSC 225³, 270³, 311³, 312³, 313³, 314³, 315³, 316³, 319³, 322³, 335³, 351⁶, 375³, 460⁶, 470³

Certificate in Community Service

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Community Service. Students may transfer into the certificate program up to 12 credits, as approved by a departmental undergraduate advisor, earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate.

Mature Entry students require the prerequisite: ENGL 212³.

30 Certificate in Community Service

NOTE: AHSC 230³, 232³, and 270³ are prerequisites for courses included in this certificate.

Phase I

- 6 AHSC 260³, 370³

Phase II

- 9 AHSC 315³, 330⁶

Phase III

- 6 Chosen from AHSC 423³ and 425³ or 443³ and 445³ or 460⁶
9 Elective credits chosen from AHSC 220³, 225³, 311³, 314³, 316³, 319³, 335³, 375³

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

Certificate in Family Life Education

The Department of Applied Human Sciences offers a 30-credit program leading to the Concordia University Certificate in Family Life Education. Students may transfer into the certificate program up to 12 credits, as approved by a departmental undergraduate advisor, earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

Students are required to complete the 0.00G entrance profile to enter the certificate.

Mature Entry students require the prerequisite: ENGL 212³.

30 Certificate in Family Life Education

NOTE: AHSC 220³, 230³, and 232³ are prerequisites for courses included in this certificate.

Phase I

12 AHSC 260³, 312³, 313³, 355³

Phase II

6 AHSC 330⁶

Phase III

3 AHSC 435³

9 Elective credits chosen from AHSC 225³, 270³, 311³, 314³, 315³, 316³, 319³, 335³, 460⁶, 465³

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the program, chosen in consultation with the coordinator of undergraduate programs.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

AHSC 215 Historical Foundations of Leisure and Recreation (3 credits)

This course offers a broad overview of leisure and recreation throughout history, highlighting selected major patterns and important similarities or differences among different historical eras. Students learn about threaded themes related to leisure and recreation that have existed throughout history, as well as the origin and development of leisure/recreation-related systems, such as leisure services and leisure studies, emphasizing Canadian and North American perspectives. The historical roots of leisure, the conditions in society that have affected leisure, the responses to those conditions, and the role of leisure in contemporary life as shaped by historical events are investigated.

NOTE: Students who have received credit for HIST 215 or for this topic under an AHSC 298 number may not take this course for credit.

AHSC 220 Lifespan Growth and Development for Practitioners (3 credits)

This survey course provides an interdisciplinary overview of biopsychosocial patterns of development over the lifespan, from conception to death. Students learn about theories of human development, with an emphasis on typical normative development, and on application of theory to practice. The course material covers key issues in development, major milestones of development, and major life events.

NOTE: Students who have received credit for PSYC 230 may not take this course for credit.

NOTE: Students registered in a Psychology program may not take this course for credit.

AHSC 223 Relationships Across the Lifespan (3 credits)

This course is designed to provide a theoretical overview of how relationships are formed, sustained, and developed/changed in each stage of human life. A variety of theories and perspectives are explored.

NOTE: AHSC students may not take this course for credit.

NOTE: Students who have received credit for AHSC 220, or for this topic under an AHSC or AHSZ 298 number, may not take this course for credit.

AHSC 225 Self-Managed Learning (3 credits)

Prerequisite: Fewer than 30 university credits. This course fosters effectiveness in orienting and directing learning which is precipitated by new personal interests and goals and/or by changing personal circumstances. It enables students to create clear personal visions, set relevant learning goals, create and organize related activities, and assess their progress. The course provides learning process models and ways to identify personal stylistic differences which affect personal learning progress and strategies.

AHSC 230 Interpersonal Communication and Relationships (3 credits)

This course is designed to provide knowledge and skill in building and maintaining interpersonal relationships characterized by mutual understanding and respect. Students can expect to enhance their understanding of themselves and their personal styles. The course focuses on effective communication behaviour. Students can expect to improve their abilities to attend to verbal and non-verbal communication; exchange constructive feedback with others; address and deal constructively with conflict; and communicate across differences, such as gender and race. Conceptual perspectives include the contextual influences in relationship dynamics and the role of affect in interpersonal communication. The course also examines value considerations.

AHSC 232 *Working in Task Groups* (3 credits)

Prerequisite: AHSC 230. This course is an introduction to understanding interaction and developmental processes of small groups and skill-building for effective participation. It enables students to learn frameworks for observing a group's process, member roles that facilitate positive group processes and task accomplishment, and models of intervention in small groups. The course provides opportunities for students to integrate the theory they learn with their experiences in a task group.

AHSC 241 *Recreation and Leisure in Contemporary Society* (3 credits)

This course introduces students to the theories and relationships of play, perceptions of free and discretionary time, concepts of leisure, and the historical foundations for the discipline. The concepts are presented as integral components of today's lifestyle. In addition, the organized recreation system is examined, with an introduction to the leisure services delivery system. The students also examine the role that leisure plays in current societal issues.

AHSC 260 *Program Planning, Design and Evaluation* (3 credits)

The course prepares students to construct effective interactive programs designed for specific client populations. Using program design principles and practices, students match learning activities to desired program outcomes, while considering participant qualities and contextual features. Emphasis is placed on assessment, design, and evaluation knowledge and skills.

AHSC 270 *Introduction to Intervention in Human Systems* (3 credits)

This course is an introduction to theory of human systems change from an interventionist perspective. It overviews general strategies of human systems intervention and salient models of practice highlighting conditions under which different intervention strategies are most effective. It especially focuses on the principles of fostering participation, collaborative inquiry, process facilitation and consultation, experiential learning, and action research. The course also features attention to values and ethical issues associated with specific strategies.

AHSC 281 *Introduction to Therapeutic Recreation* (3 credits)

An examination of the fundamental concepts of therapeutic recreation. Included is the study of the historical foundations and the basic terminology, purposes, and theories of therapeutic recreation.

AHSC 285 *Social Psychology of Leisure* (3 credits)

Prerequisite: AHSC 241 previously or concurrently. This course examines how personal and social factors shape individuals' perceptions, experiences, and responses to the availability of discretionary time. Students review current theory and research focusing on the relationship between leisure and individual functioning, and applications to human problems associated with leisure. *NOTE: Students who have received credit for PSYC 286 or for this topic under an AHSC 298 number may not take this course for credit.*

AHSC 298 *Selected Topics in Applied Human Sciences* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 310 *Tourism in Canada* (3 credits)

This course presents an examination of the tourism industry in Canada, including concepts, research, practices, and promotion. Topics covered include destination motivation, commercial recreation, business travel, trends in tourism development, government agencies, the economics of promotion, social objectives, market segmentation, and ethical and legal considerations.

AHSC 311 *Respecting Diversity in Human Relations* (3 credits)

Prerequisite: 30 university credits including AHSC 230. This course examines theories of diversity and difference, as well as the effects of biases, stereotypes and stigmatization in personal interactions, institutional practices, and socio-cultural norms. It considers the role of identity-related issues such as age, culture, disability, ethnicity, gender, geographical location, health status, history, language, power, race, religion, sexual orientation, and social class in human relationships and systems.

NOTE: Students who have received credit for AHSC 245 may not take this course for credit.

AHSC 312 *Sexuality in Human Relations* (3 credits)

Prerequisite: 30 university credits including AHSC 220, 230. This course provides students with knowledge of physical and psychosocial aspects of sexuality in relationships through life and examines values, attitudes, and issues related to the development and expression of sexuality. Topics include gender, family, cultural and media influences; historically and culturally based attitudes; prevention and sexually transmitted diseases; self-perception and identity in sexuality; and emotion and sexuality. The course aims to foster respect for persons and diversity.

NOTE: Students who have received credit for AHSC 253 may not take this course for credit.

AHSC 313 *Family Communication* (3 credits)

Prerequisite: AHSC 220, AHSC 230. This course is a requirement for students enrolled in the Certificate in Family Life Education. This course is an examination of patterns, effective approaches, and issues in communication among persons in primary partnerships and families. It also explores topics such as diversity in forms of "family," decision-making, problem-solving, power relations, gender issues, managing differences in expectations, and the influences of cultural, social, and economic contexts.

NOTE: Students who have received credit for AHSC 254 may not take this course for credit.

AHSC 314 *Adolescence: Issues and Intervention* (3 credits)

Prerequisite: AHSC 220. This course links knowledge of adolescent development to a more detailed examination of related adolescent patterns and issues, including peer relations and friendship, parental and family relations, identity, sexuality and gender, and socio-economic and cultural influences. Directed towards students interested in working with adolescents, the course combines theoretical and practical knowledge relating to adolescents, their parents and their concerns for the purpose of enhancing the adolescent experience.

AHSC 315 *Interviewing* (3 credits)

Prerequisite: AHSC 230. This course reviews different forms and concepts relevant to interviewing for use in work and community settings. It examines communication influences on the interviewer and interviewee and the limitations of different interview approaches. It enables students to structure and design interviews, to build rapport, and to manage information flow.

NOTE: Students who have received credit for AHSC 256 may not take this course for credit.

AHSC 316 *Adulthood: Patterns and Transitions* (3 credits)

Prerequisite: AHSC 220. This course examines relationships, transitions, and developmental change through early adulthood and middle age. Relevant adult development theories are reviewed. Students explore the nature and significance of close relationships, life transitions, choices and contextual influences. This course includes a consideration of the societal values inherent in notions of maturity, optimal environments, and interventions to enhance quality of life.

AHSC 319 *Older Adulthood: Issues and Intervention* (3 credits)

Prerequisite: AHSC 220. This course explores developmental change patterns and differences among people in older adulthood. Topics include retirement and pensions, concepts of health, fitness, well-being and models of health care, housing and transportation, leisure, family and social relations, ethnicity and aging, loss and grief, death and dying. Designed for persons interested in working with older adults, the course fosters awareness of myths, stereotypes and ageism, and emphasizes an attention to community social support and interventions which are enabling.

AHSC 320 *Family and Youth Legislation* (3 credits)

Prerequisite: AHSC 220. This course reviews all aspects of federal and provincial legislation that impact on practice with families. Legislation governing marriage, divorce and custody, family violence, child and youth protection and placement, youth crime, child advocacy and the challenges of working with families in relation to the legislation, are presented with a particular focus on the rights of children and the legal responsibilities of practitioners.

AHSC 322 *Fundamentals of Child- and Youth-Care Work* (3 credits)

Prerequisite: AHSC 220. The objectives of this course are to provide students with an understanding of the scope and status of child- and youth-care work, to sensitize them to the necessary competencies and daily challenges of this work in a range of settings, and to review relevant theory. An overview of the history of the field is provided, as well as a review of seminal writings and recent literature on best practices.

NOTE: Students who have received credit for AHSC 402 or for this topic under an AHSC 398 number may not take this course for credit.

AHSC 323 *Gender and Leisure* (3 credits)

Prerequisite: 30 university credits including AHSC 241 or 242. This course focuses on theory and empirical research concerning the relationships between gender and leisure. This includes topics such as the effect of gender on leisure meanings, constraints to leisure, and participation in leisure. In addition, this course explores the cultural influences of leisure related to gender identity and gender relations. As part of this, the course explores the role that leisure plays as a significant site for the social construction and contestation of gender. Emphasis is placed on understanding ways in which gender relations and gender role expectations affect and are affected by leisure.

AHSC 330 *Leadership in Small Groups* (6 credits)

Prerequisite: AHSC 232, 260. This course develops facilitative skills and approaches to leadership in small groups. Students learn effective ways to observe and to interpret the significance of group behaviour for the purpose of intervening effectively. The course highlights factors optimizing participation, patterns of communication and influence, decision-making, problem-solving, collaborative planning, conflict management, and effects of gender and other identity-related differences. Students identify their leadership styles and group facilitation skills to develop flexibility in adapting to diverse group situations.

AHSC 333 *Leisure and the Environment* (3 credits)

Prerequisite: 30 university credits including AHSC 241 or 242. This course examines the state of the natural environment, and explains how leisure service providers play a crucial leadership role in fulfilling the needs of both the public and the environment.

AHSC 335 *Power and Conflict Resolution in Human Systems* (3 credits)

Prerequisite: 30 university credits. This course gives students a theoretical and practical overview of the role of power and conflict in human relationships and human systems — groups, organizations, and communities. The concept of power is explored in depth since the use of power is central in both the creation and the resolution of conflict. The course focuses on the development of analytical tools that serve to identify the different elements leading to, maintaining or escalating conflicts. Particular attention is given to ethics associated with the use of power and management of conflict.

AHSC 340 *Employee Recreation Services* (3 credits)

Prerequisite: 30 university credits including AHSC 241 or 242. This course examines the origins and development of recreation related to the place of employment. It includes critical analysis of the research literature in the areas of work/leisure relationships, cost/benefits, government intervention, and program design and family involvement.

AHSC 350 *Leisure Education* (3 credits)

Prerequisite: AHSC 241, 260. This course offers an introduction to the field of leisure education. The history and underlying philosophy of the concept is presented. The roles of the school, community, and community-serving agencies are examined. Existing models are analyzed and discussed.

AHSC 351 *Basic Counselling Skills and Concepts* (6 credits)

Prerequisite: 30 university credits including AHSC 230. This course introduces students to counselling theories and develops an understanding for theoretical and value frameworks of the helping relationship. It fosters the development of basic helping relationship skills applicable in everyday relationships in work and social settings. Skill areas include attending skills, such as attending to nonverbal behaviour, reflection of content, reflection of feeling, paraphrasing and summarizing; and influencing skills, such as interpretation and analysis. Also highlighted are ethical issues and attention to cultural differences.

AHSC 355 *Foundations of Family Life Education* (3 credits)

Prerequisite: AHSC 232, 260, 313. This course examines Family Life Education from its inception as a field of practice to its current status in North America. It highlights complex related issues and the role of the educator, including attention to personal values and ethical principles of the practitioner. Topics include distinctions between prevention education and therapeutic intervention, and an overview of the range of different family life education programs and current practices.

AHSC 360 *Play, Adult Learning and Development* (3 credits)

Prerequisite: 30 university credits including AHSC 220. This course examines the concept of play in adult learning and development. Gender, age, ethnic and social class diversity are explored as they relate to adult play behaviour.

AHSC 361 *Leisure Services Leadership* (3 credits)

Prerequisite: AHSC 230, 241. This course offers an analysis of leadership theory and its application to leisure services. Major topics are the principles and practices of leadership, group dynamics, leadership skill development and program planning, and the unique role of the leisure leader.

AHSC 370 *Principles and Practices of Human Systems Intervention* (3 credits)

Prerequisite: AHSC 270. This course is about the theory and practice of human system intervention. It emphasizes collaborative strategies for effecting change in human systems within a broad range of intervention alternatives. It focuses on the interventionist's role in effective change strategy development, initiation, management, and evaluation. The course is taught with a special focus on personal and professional values and ethical issues related to human systems intervention.

AHSC 371 *Community Recreation Planning* (3 credits)

Prerequisite: AHSC 241, 260. The course focuses on the application of recreation planning, theory, and skills. It examines methods and procedures used to assess client needs, design and deliver programs and services, and evaluate their impact. Practical experience is gained through a combination of field experience, project planning, and group work.

AHSC 375 *Organizational Leadership: A Human Systems Approach* (3 credits)

Prerequisite: AHSC 270. This course is an introduction to the practice of leadership in organizations with a human systems approach and perspective. The course examines a range of theoretical concepts current in organizational leadership practice including systems thinking, team-based leadership, and strategy formulation from a leadership perspective. It provides an opportunity for students to examine ethics, values, and abilities required in organizational leadership today.

AHSC 380 *Quantitative Research Methods for Practitioners* (3 credits)

Prerequisite: 30 university credits including AHSC 260. This course gives an overview of a range of data collection and analysis strategies which are relevant to collaborative and participative intervention practice. It examines practical considerations for selecting specific quantitative approaches and prepares students to formulate and administer intervention-related questionnaires, to conduct basic quantitative analyses, and to present data results to interested individuals and groups. The course also examines basic ethical requirements in conducting applied social research.

AHSC 381 *Concepts in Therapeutic Recreation Programming* (3 credits)

Prerequisite: AHSC 241, 260, 281. This course explores current therapeutic recreation practices with emphasis on rehabilitation in community and clinical settings such as hospitals, group homes, psychiatric centres, rehabilitation clinics, and correctional centres. Leisure planning and assessment models are studied to identify the modes of recreational activity which may be used as an intervention.

AHSC 382 *Qualitative Research Methods for Practitioners* (3 credits)

Prerequisite: 30 university credits including AHSC 260. This course gives an overview of a range of qualitative approaches to practical projects and interventions. It prepares students to design and conduct interviews (including making decisions about respondent selection) with individuals and in focus groups, as well as participant observation. It also enables students to analyze qualitative data from these sources as well as documentary sources in light of practical project purposes. The course highlights special ethical considerations in conducting qualitative forms of applied social research.

AHSC 383 *Therapeutic Recreation and Physical Disabilities* (3 credits)

Prerequisite: AHSC 220, 281. This course gives an overview of the role and impact of therapeutic recreation services for individuals with physical disabilities and limitations. It analyzes the barriers to recreation participation along with the planning and designing of a safe and accessible recreational environment.

AHSC 384 *Therapeutic Recreation: Cognitive Disabilities and Illness* (3 credits)

Prerequisite: AHSC 220, 281. This course gives an overview of the role of therapeutic recreation services for individuals with cognitive disabilities and limitations or illness. It focuses on the etiology, impact, and barriers related to specific conditions. It also studies legislation trends and resources for community recreation integration and the role of transitional programs.

AHSC 398 *Selected Topics in Applied Human Sciences* (3 credits)

AHSC 399 *Selected Topics in Applied Human Sciences* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

AHSC 405 *Youth Work Intervention* (3 credits)

Prerequisite: 30 university credits including AHSC 322. This course focuses on problems of children and youth, including difficulties with attachment, behaviour disorders, consequences of abuse and neglect, and substance abuse. It covers models of intervention and assessment that are current in youth work such as Therapeutic Crisis Intervention (TCI), strength-based approaches, and therapeutic procedures.

AHSC 410 *Advanced Youth Work Intervention* (3 credits)

Prerequisite: AHSC 405. This course covers specialized professional skills of youth work. There is a required fieldwork component to include one hour per week of observation in a child and youth care setting. The goal of the course is to assist the student in individualizing intervention plans, and in evaluating outcomes of intervention within the context of ethical youth work practice.

AHSC 421 *Political and Legal Aspects of Leisure Services* (3 credits)

Prerequisite: 30 university credits including AHSC 241. This course provides students with a theoretical understanding of the complexity of providing leisure services in the province of Quebec. The course examines the administration of leisure services in municipal, regional, provincial, and federal governments. The course examines law as it applies to aspects of recreational activities in the areas of organization, supervision, and participation. The course covers the Quebec Civil Code, the Canadian Constitution, and the Quebec and Canadian Charter of Rights and Freedoms as they apply to the study of leisure.

AHSC 422 *Youth and Leisure* (3 credits)

Prerequisite: 30 university credits including AHSC 220, 241, 260. This course develops an understanding of the leisure needs of youth from emotional, physical, psychological, and sociological perspectives. Major areas of discussion include leisure preferences and needs assessment, strategies for programming, dealing with youth-at-risk, and recreational opportunities for youth. Lectures and laboratory.

AHSC 423 *Organization Development I* (3 credits)

Prerequisite: AHSC 270, 330. This course introduces students to the characteristics of organizations as open systems. The evolution of organization development and the principle theories and perspectives that have helped to define the field are studied. Organization development methods as well as criteria for examining organizational effectiveness, underlying beliefs, values, and assumptions are examined. Key concepts covered are organization vision, mission and goals, and organization norms and culture. *NOTE: Students who have received credit for AHSC 420 may not take this course for credit.*

AHSC 425 *Organization Development II* (3 credits)

Prerequisite: AHSC 423. This course provides students with the opportunity to apply organization development concepts and strategies to effect change in organizations. Using theoretical, case, and experiential approaches, the focus of instruction progressively guides the student through the stages of organization development. Concepts covered include entry and contracting, identifying organizational issues and goals for change, collecting and analyzing pertinent organizational data, and diagnosis and feedback to the client. Opportunities for the development of change-agent skills are provided through the emphasis on in-class applications.

NOTE: Students who have received credit for AHSC 420 may not take this course for credit.

AHSC 427 *Administration of Leisure Services* (3 credits)

Prerequisite: 60 university credits including AHSC 361; AHSC 371 or 381. This course offers an analysis of the processes involved in planning and managing leisure service delivery systems. Topics to be studied include principles of planning, organization, budgeting, and supervision.

AHSC 431 *Leisure Sciences Seminar* (3 credits)

Prerequisite: 60 university credits including AHSC 215, 361, 371; and PHIL 255 previously or concurrently. This is a third-year interdisciplinary seminar in which students can tie together all they have learned in the Leisure Sciences program. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area.

AHSC 432 Seminar in Therapeutic Recreation (3 credits)

Prerequisite: 60 university credits including AHSC 215, 361, 381, 383, 384; and PHIL 255 previously or concurrently. This is a third-year interdisciplinary seminar in which students can tie together all that they have learned in the Therapeutic Recreation program. Additionally, students are set on a course of study that should continue after they graduate so that they can keep up with future developments in this area.

AHSC 435 Fieldwork Practice (3 credits)

Prerequisite: AHSC 330. This course must be taken in final year. This course provides an opportunity for students to integrate theory into practice in the design, facilitation and evaluation of small group process. Students lead one small task or learning group in a community, an organizational or an institutional setting. The fieldwork is combined with class sessions for orientation, supervision, reflection and evaluation.

AHSC 437 Internship in Leisure Sciences (6 credits)

Prerequisite: 60 university credits including AHSC 361, 371; permission of the Department. This course provides students with an opportunity to design, implement, and evaluate programs; to facilitate groups in a variety of settings; and to establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

AHSC 438 Internship in Therapeutic Recreation (9 credits)

Prerequisite: 60 university credits including AHSC 361, 381, 383, 384; permission of the Department. This course provides students with an opportunity to design, implement, and evaluate programs, to facilitate groups in a variety of settings, and to establish working relationships with field personnel. In consultation with their supervisors, students select a site related to their learning interests. Students learn to develop and manage their own project and to self-assess their work. The course includes fieldwork, seminars, and team meetings.

AHSC 439 Internship in Human Relations (6 credits)

Prerequisite: 60 university credits including AHSC 330, 370; AHSC 423 and 425 or 443 and 445 previously or concurrently; permission of the Department. This course provides students with an opportunity to design, implement, and evaluate small group leadership in several settings, and to negotiate working relationships with site personnel. Students will be solely responsible for facilitating several task or learning groups in community, work, or educational settings. The sites will be selected according to students' learning interests and in consultation with the course instructor. The course includes supervisory team meetings and internship seminar sessions.

AHSC 443 Community Development I (3 credits)

Prerequisite: AHSC 270, 330. This course examines the field of community development through the presentation of basic models. The examination of these models in historical and environmental contexts focuses on understanding how they reflect different views of social relationships. Students explore different approaches to working with communities and the implications for practice. They also examine ways of analyzing and defining community resources, problems, and issues.

NOTE: Students who have received credit for AHSC 440 may not take this course for credit.

AHSC 444 The Older Adult and Leisure (3 credits)

Prerequisite: 30 university credits including AHSC 220, 241, 260. This course examines the aging process in the physical, cognitive, and affective domains. It familiarizes the student with the characteristics of the aging population as related to leisure, recreation, and lifestyle. It focuses on developing and understanding the impact of lifelong leisure in the aging process. The course reviews issues related to the phenomenon of leisure in retirement and discusses the process of delivering leisure services to older individuals.

AHSC 445 Community Development II (3 credits)

Prerequisite: AHSC 443. This course focuses on how to intervene in community contexts; identify community structures and inter-group dynamics relevant to intervention planning; gather and organize data for use by communities; develop intervention plans that involve the community each step of the way and that foster leadership within its ranks; and evaluate an intervention. Attention is given to cultural diversity and value differences.

NOTE: Students who have received credit for AHSC 440 may not take this course for credit.

AHSC 450 Leisure Assessment and Counselling (3 credits)

Prerequisite: 30 university credits including AHSC 281, 350. This course focuses on the use of assessment applied to individual leisure abilities, interests and needs, and the application of counselling theory to the field of leisure services. A variety of assessment tools are analyzed/interpreted. Theories, models, and methods of leisure counselling are discussed.

AHSC 456 Advanced Family Life Education (3 credits)

Prerequisite: AHSC 355. This course covers advanced professional skills of family life education with a focus on ethics, professionalism, and certification. Topics include group dynamics, communication skills, and effective leadership. There is a required fieldwork component to include one hour per week of observation in a family life education setting.

AHSC 460 *Health Promotion* (6 credits)

Prerequisite: 30 university credits including AHSC 230. This course helps students to develop intervention skills and theoretical understanding in the area of health promotion. It is of particular interest to students whose career interests involve lifestyle planning, health promotion, and stress management. Topics include health and wellness, stress and illness, psychological and physical self-appraisal processes, psychosomatic processes and disorders, understanding addictions and their management, health-promotion interventions, behavioural self-management, and issues in medical/psychological health compliance.

AHSC 465 *Parent-Child Relations* (3 credits)

Prerequisite: 30 university credits including AHSC 232, 313. This course provides an advanced understanding of parenting theories, research, and applications in the context of parent-child relations over the life span. Topics include parenting rights and responsibilities, parenting practices and programs, high-risk parenting, and parental assessment.

NOTE: Students who have received credit for this topic under an AHSC 498 number may not take this course for credit.

AHSC 470 *Basic Human Relations Laboratory* (3 credits)

Prerequisite: 60 university credits including AHSC 330. This is an intensive format six-day learning session through which students may expect to increase their awareness of how their behaviour affects others, increase their skill and understanding of effectively and responsibly communicating to and exchanging feedback with others, increase their understanding of leadership and authority relations, and deepen their understanding of group dynamics.

AHSC 480 *Internship in Family Relations* (6 credits)

Prerequisite: 60 university credits including AHSC 456 and 465; permission of the Department. This 360-hour internship must be completed over two terms and involves a supervised placement implementing family life education programs in a wide range of settings such as community organizations, education, and health care. Students are responsible for developing, implementing, and evaluating a number of lesson plans and programs, and are supervised and evaluated by an on-site field supervisor.

AHSC 485 *Internship in Youth Work* (6 credits)

Prerequisite: 60 university credits including AHSC 410; permission of the Department. This 360-hour internship must be completed over two terms and involves a supervised placement in a child and youth care or youth protection setting. Students are responsible for developing, implementing, and evaluating a minimum number of intervention plans, and are supervised and evaluated by an on-site field supervisor.

NOTE: Students who have received credit for this topic under an AHSC 499 number may not take this course for credit.

AHSC 490 *Independent Study I* (3 credits)

Prerequisite: 30 university credits; permission of the Department. Students work on topics in consultation with a study supervisor. The study may include readings, field studies, and/or research.

AHSC 491 *Independent Study II* (3 credits)

Prerequisite: 30 university credits; permission of the Department. A student who has received credit for AHSC 490 may register for AHSC 491.

AHSC 498 *Advanced Topics in Applied Human Sciences* (3 credits)**AHSC 499 *Advanced Topics in Applied Human Sciences* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.030

BIOLOGY

Faculty

Chair

PATRICK J. GULICK, PhD *Calif.(Davis)*, Professor

Distinguished Professors Emeriti

RAGAI K. IBRAHIM, PhD *McG.*

ELAINE B. NEWMAN, PhD *Harv.*

Professors

GRANT BROWN, PhD *Nfld.*

JAMES GRANT, PhD *Guelph*

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ROBERT M. ROY, PhD *Tor.*

REGINALD K. STORMS, PhD *Alta.*

VLADIMIR TITORENKO, PhD *Inst.Genetics & Selection Indust.Microorg.(Moscow)*

ADRIAN TSANG, PhD *York (Can.)*

MALCOLM WHITEWAY, PhD *Alta.*

Associate Professors

CATHERINE BACHEWICH, PhD *York (Can.)*

SELVADURAI DAYANANDAN, PhD *Boston*

EMMA DESPLAND, PhD *Oxf.*

VINCENT MARTIN, PhD *Br.Col.*

MICHAEL SACHER, PhD *McG.*

LUC VARIN, PhD *C'dia.*

ROBERT WELADJI, PhD *Norwegian Life Sci.*

WILLIAM ZERGES, PhD *Prin.*

Assistant Professors

CHRISTOPHER BRETT, PhD *Johns H.*

IAN FERGUSON, PhD *C'dia.*

DYLAN FRASER, PhD *Laval*

MADOKA GRAY-MITSUMUNE, PhD *Br.Col.*

ALISA PIEKNY, PhD *Calg.*

DAVID WALSH, PhD *Dal.*

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Richard J. Renaud Science Complex

514-848-2424, ext. 3400

Department Objectives

The Biology Department is dedicated to teaching and research that advance understanding of life from molecules and cells to organisms, populations, and entire ecosystems. The Department's programs inspire students with an appreciation of the rich diversity of the living world.

Students acquire a comprehensive grounding in modern biology through classroom study as well as extensive hands-on training in research methodology. A variety of specialized laboratories and equipment supports both research and teaching activities.

Programs

The Biology Department offers Honours and Specialization programs in Biology, Cell and Molecular Biology, and Ecology, as well as Major and Minor programs in Biology. Students planning a career or graduate studies in the biological sciences normally follow the appropriate honours or specialization program. The major program is designed for students who wish to study biology

and either obtain a more general education or pursue an additional program in another discipline. The major program can be combined with a major in another department.

Students registered in the Honours, Specialization, or Major in Biology may select Biology electives in various subject areas in order to obtain a broad overview of the discipline. However, it is possible for students to pursue in-depth studies in specific areas such as animal biology, plant biology, or microbiology and biotechnology.

The minor program can only be taken by students registered in another degree program and provides an opportunity to gain a basic exposure to the main sub-disciplines of Biology or to pursue one such area in some depth.

Students are strongly encouraged to take advantage of academic counselling services available in the Biology Department in order to select the program and courses that best meet their needs. Students may transfer among programs after the first year of study since the core courses in all programs are quite similar.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

72 BSc Honours in Biology

30 BIOL 225³, 226³, 227³, 261³, 266³, 367³, 490⁶; CHEM 221^{3*}, 271³

3 Chosen from BIOL 322^{3***}; CHEM 212³

9 Chosen from BIOL 330³, 337³, 340³, 364³, 371³, 382³, 385³

30 Chosen from CHEM 222³; Biology credits** at the 300 and 400 levels with at least nine credits at the 400 level

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in another program, to the departmental honours advisor normally following the completion of 30 credits. Admission, retention, and graduation in an honours program requires that the student has a cumulative and last annual GPA of at least 3.30 with no grade below C.

72 BSc Honours in Cell and Molecular Biology

51 BIOL 225³, 226³, 261³, 266³, 364³, 366³, 367³, 368³, 466³, 490⁶; CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³, 477³

21 Chosen from BIOL 227³; Biology or Chemistry/Biochemistry credits** at the 300 and 400 levels, with at least 12 credits at the 400 level

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in another program, to the departmental honours advisor normally following the completion of 30 credits. Admission, retention, and graduation in an honours program requires that the student has a cumulative and last annual GPA of at least 3.30 with no grade below C.

72 BSc Honours in Ecology

33 BIOL 225³, 226³, 227³, 261³, 266³, 367³, 450³, 490⁶; CHEM 221^{3*}, 271³

3 Chosen from BIOL 322^{3***} or equivalent

9 Chosen from BIOL 330³, 337³, 340³, 364³, 371³, 382³, 385³

12 Chosen from BIOL 321³, 350³, 351³, 353³, 354³

6 Chosen from BIOL 451³, 453³, 457³, 459³

9 Chosen from CHEM 222³; Biology credits** at the 300 and/or 400 levels

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in another program, to the departmental honours advisor normally following the completion of 30 credits. Admission, retention, and graduation in an honours program requires that the student has a cumulative and last annual GPA of at least 3.30 with no grade below C.

60 BSc Specialization in Biology

24 CHEM 221^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³

3 Chosen from BIOL 322^{3***}; CHEM 212³

9 Chosen from BIOL 330³, 337³, 340³, 364³, 371³, 382³, 385³

24 Chosen from CHEM 222³; Biology credits** at the 300 and 400 levels with at least six credits at the 400 level

66 BSc Specialization in Cell and Molecular Biology

45 CHEM 212³, 221^{3*}, 222^{3*}, 271³, 375³, 477³; BIOL 225³, 226³, 261³, 266³, 364³, 366³, 367³, 368³, 466³

21 Chosen from BIOL 227³; Biology or Chemistry/Biochemistry credits** at the 300 and 400 levels, with at least 12 credits at the 400 level

60 BSc Specialization in Ecology

24 BIOL 225³, 226³, 227³, 261³, 266³, 367³; CHEM 221^{3*}, 271³

3 Chosen from BIOL 322^{3***} or equivalent

9 Chosen from BIOL 330³, 337³, 340³, 364³, 371³, 382³, 385³

9 Chosen from BIOL 321³, 350³, 351³, 353³, 354³

6 Chosen from BIOL 450³, 451³, 453³, 457³, 459³

9 Chosen from CHEM 222³; Biology credits** at the 300 and/or 400 levels

- 45 BSc Major in Biology**
 24 CHEM 221^{3*}, 271³; BIOL 225³, 226³, 227³, 261³, 266³, 367³
 3 Chosen from BIOL 322^{3***}; CHEM 212³
 6 Chosen from BIOL 330³, 337³, 340³, 364³, 371³, 382³, 385³
 12 Chosen from CHEM 222³; Biology credits** at the 300 and 400 levels with at least three credits at the 400 level
- 24 Minor in Biology**
 9 BIOL 225³, 226³, 227³
 3 Chosen from BIOL 206³, 210³, 261³
 12 Biology elective credits

**Students entering the program with Cegep Organic Chemistry must replace these credits with an equivalent number of credits in Biology or Chemistry/Biochemistry.*

***In addition to BIOL courses at the 300 and 400 levels, these courses can include BIOL 227 (only in the Cell and Molecular Biology programs and counting as a 300-level elective) and the following CHEM courses: 222 (counting as a 300-level elective), 326, 335, 375, 425, 470, 471, 472, 475, 476, 478, 481, and 498 if the topic is approved by formal student request through the Biology departmental advisor.*

****See §200.7.*

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

BIOL 200 Fundamentals of Human Biology (3 credits)

A series of lectures, demonstrations, and seminars to provide non-biologists with a general survey of the fundamental principles of life, with special emphasis on the structures and functions of human beings. Lectures only.

NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit. Students who have completed Cegep Biology 921/931 may not take this course for credit.

BIOL 201 Introductory Biology (3 credits)

Fundamentals of plant and animal biology: basic physics and chemistry of life; cell and tissue structures and functions; anatomy and physiology of human systems; survey of plant and animal taxonomy, ecology, heredity, and evolution. Lectures and laboratory.

NOTE: Students with Cegep Biology 301 or equivalent may not take this course for credit. Students entering BIOL programs without Cegep Biology 301 or equivalent must take this course, but not for program credit.

BIOL 202 General Biology (3 credits)

This course presents the fundamentals of biology including the basic physics and chemistry of life, the structure and functions of cell and tissues, and aspects of anatomy, physiology, taxonomy, heredity and evolution, with examples ranging from micro-organisms to humans. Lectures only.

NOTE: Students with Cegep Biology 301, 101-NYA or BIOL 201 may not take this course for credit. Students enrolled in BSc programs may not take this course for credit.

BIOL 203 Fundamental Nutrition (3 credits)

This course deals with food composition (carbohydrates, lipids, proteins, vitamins, and minerals), its absorption and utilization, energy balance, special diets, and food technology. Lectures only.

NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

BIOL 205 Introduction to Sustainability (3 credits)

This course begins with an introduction to the science of ecology and to the concept of sustainability as an ecological principle. The concept of sustainability is then broadened to include humans, as students are introduced to ethics, economics, and resource management from an eco-centric point of view. Students are encouraged to think critically about current environmental problems and to take action on an individual project.

NOTE: Students who have received credit for BIOL 208, BIOZ 208 or for this topic under a BIOL 298 number may not take this course for credit.

BIOL 206 Elementary Genetics (3 credits)

A survey of classical and contemporary developments in the study of heredity, with particular attention to human examples. This course is open to the general student body. Lectures only.

NOTE: Students who have received credit for BIOL 261 may not take this course for credit.

NOTE: Students transferring into a Biology program may retain degree credit for this course.

BIOL 208 Environmental Biology (3 credits)

This course examines the principles and concepts of ecosystems, the interaction of organisms and their environment. Energy flow and nutrient cycling in ecosystems, population dynamics, and community organization. Lectures only.

NOTE: Students registered in a Biology or Biochemistry program may not take this course for credit.

NOTE: Students who have received credit for BIOZ 208, BIOL 205 or for this topic under a BIOL 298 number may not take this course for credit.

BIOL 210 *Genetics and Human Welfare* (3 credits)

This course is an introduction to the principles of inheritance, the structure and manipulation of DNA, the organization of genomes and the function of genes. Applications based on DNA structure include exploring human origins and forensic DNA. Gene function and manipulation are illustrated by human traits and genetic diseases, cancer, genetic testing, production of proteins for medical and industrial use, and the production of genetically modified organisms. Scientific progress is illustrated and societal and ethical questions raised by progress in genetics are discussed. This course assumes students have no science background.

NOTE: Students registered in a Biology or Biochemistry program other than the Minor in Biology may not take this course for credit.

NOTE: Students who have received credit for BIOZ 210 may not take this course for credit.

BIOL 225 *Form and Function of Organisms* (3 credits)

Prerequisite: Cegep Biology 301 or 101-NYA or BIOL 201. An introduction to plant and animal form and function is presented.

This course provides an overview of basic physiological and morphological aspects of plants and animals that allow survival and reproduction. Topics in animal biology include animal architecture, internal fluids, homeostasis, digestion and nutrition, nervous and chemical coordination; topics in plant biology include plant organization, photosynthesis, respiration, water relations, and growth regulation. Reproduction and development of both plants and animals are introduced. Lectures only.

BIOL 226 *Biodiversity and Ecology* (3 credits)

Prerequisite: Cegep Biology 301 or 101-NYA or BIOL 201. This course introduces the evolution, biodiversity, and ecology of organisms. The origin and diversity of life, from prokaryotes, through simple eukaryotes to multi-cellular organisms are introduced. Natural selection, speciation, and phylogeny, stressing evolutionary relationships in conjunction with changing conditions on earth, are presented. The course introduces major concepts in ecology: the physical and chemical environment, population structure, life histories, species interactions, communities, and ecosystems. Lectures only.

BIOL 227 *Laboratory Studies in Biodiversity* (3 credits)

Prerequisite: BIOL 225; BIOL 226 previously or concurrently. Laboratory exercises are designed to acquaint students with biodiversity and to introduce methodologies common to studies of organisms and populations. This course includes field trips, dissections, use of taxonomic keys, and basic exercises in physiological function. Use of the microscope, variability within populations, basic techniques in microbiology, and elementary population dynamics are presented. Tutorials include videotapes of plant and animal diversity, history, and behaviour. Laboratory and tutorial.

BIOL 261 *Molecular and General Genetics* (3 credits)

Prerequisite: Cegep Biology 301 or 101-NYA or BIOL 201; CHEM 221 previously or concurrently. Basic genetic principles, including mechanisms of meiosis and mitosis, Mendelian genetics, recombination, gene mapping, and chromosome rearrangements; an introduction to molecular genetics, including nucleic acid structure and biosynthesis transcription and translation; the course also includes an introduction to recombinant DNA technology and to concepts of population genetics. Lectures and tutorials.

BIOL 266 *Cell Biology* (3 credits)

Prerequisite: Cegep Biology 301 or 101-NYA or BIOL 201. Structure and functions of the cell and its organelles: cytoskeleton, chromosomes, cell cycle and cell division, organelle biogenesis, molecular motors, trafficking of proteins and membranes, signal transduction, trans-membrane transport, cancer, apoptosis. Lectures only.

BIOL 298 *Selected Topics in Biology* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 321 *Evolution* (3 credits)

Prerequisite: BIOL 225, 226. Through readings, discussions, and lectures, students explore the evidence for evolution, as well as current theories for the mechanisms that cause evolutionary change. Topics covered include principles of inheritance, the origin of genetic variation, adaptation through natural selection, random processes in evolution, the origin of species, and the role of macroevolutionary processes in shaping current patterns of biodiversity. Lectures and tutorials.

BIOL 322 *Biostatistics* (3 credits)

Prerequisite: Nine BIOL credits in a Biology Major, Honours, or Specialization program or completion of Stage I of the Geography Honours or Specialization programs in Environmental Science or permission of the Department. Statistical methods for the biological sciences; sampling; experimental design; data description; elementary probability; binomial, Poisson and Normal distributions; statistical inference; hypothesis testing; chi-square; analysis of variance; correlation; regression; covariance analysis; and analogous non-parametric techniques. Lectures and laboratory. *NOTE See §200.7*

BIOL 330 *Vertebrate Biology* (3 credits)

Prerequisite: BIOL 225, 226. This course surveys the biology of vertebrates. Topics include the evolution of the major groups and a comparative analysis of the form (anatomy), function (physiology), and life history of vertebrates. Examples from the local fauna are emphasized. Lectures and laboratories.

NOTE: Students who have received credit for BIOL 387 may not take this course for credit.

BIOL 337 *Invertebrate Biology* (3 credits)

Prerequisite: BIOL 225, 226, 227. This course surveys the diversity of invertebrates and their functional systems, emphasizing the basic themes that define each phylum and those that are common to all animals. The course focuses on evolution, life histories, physiology, and anatomy of the major phyla and the diversity of the minor phyla. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a BIOL 398 number may not take this course for credit.

BIOL 340 *Plant Biology* (3 credits)

Prerequisite: BIOL 225, 226. This course surveys the biology of the plant kingdom. Topics include the evolution of the major groups and a comparative analysis of the form (anatomy), function (physiology), and life history of plants. Examples from the local flora are emphasized. Lectures and laboratory.

BIOL 350 *The Ecology of Individuals* (3 credits)

Prerequisite: BIOL 225, 226. This course is designed to introduce students to the diversity of adaptations possessed by individuals which enables them to interact successfully with the abiotic and biotic environment. Major topics include adaptive responses to temperature, water, light, and other species. Physiological adaptations are emphasized. Lectures only.

BIOL 351 *Basic Population Ecology* (3 credits)

Prerequisite: BIOL 226. This course introduces the processes which determine the distribution and abundance of individuals in populations. Population growth, density-dependent and density-independent population regulation, survivorship, life history parameters, the population dynamics of competition, predation and parasitism, and the roles of predation and competition in affecting community structure are discussed. Lectures and tutorials.

BIOL 353 *Communities and Ecosystems* (3 credits)

Prerequisite: BIOL 225, 226; BIOL 227 previously or concurrently. This course presents an introduction to biological communities, the processes that maintain them and their emergent properties. Topics include the interactions between abiotic and biotic factors in determining community composition, the concepts of niche and habitat, succession theory, community diversity and stability, energy flow and nutrient cycling. Examples emphasize both aquatic and terrestrial ecosystems, and the major global biomes. Lectures only.

BIOL 354 *Behavioural Ecology* (3 credits)

Prerequisite: BIOL 226. Behavioural ecology is the study of behavioural adaptation. The topics include foraging, anti-predator, fighting, mating, reproductive and social behaviour. Students will be introduced to optimality and game theories. Lectures and tutorials.

BIOL 364 *Cell Physiology* (3 credits)

Prerequisite: BIOL 266; CHEM 271. This course covers general and specialized processes at the molecular and cellular level in eukaryotes and prokaryotes; protein folding and degradation, signalling by nerves, bioenergetics (respiration and photosynthesis), cell motility, muscle contraction, eukaryotic cilia and flagella, sensory perception, and fundamental immunology. Lectures only.

BIOL 366 *Mechanisms of Development* (3 credits)

Prerequisite: BIOL 261, 266. This course explores the mechanisms of cellular interactions and genetic control that govern cell differentiation and development in a range of organisms, from simple model systems to mammals. Specific questions address how cell movement and cell recognition take place, how the genome is restricted in differentiation, how cytoplasmic signals influence differentiation, how gradients affect development, how genes control segmentation, and how growth factors and hormones influence development. The role of genetic engineering in the understanding of developmental processes is discussed. The course is based on gaining an understanding of the basic concepts, mechanisms, and experimental tools used in developmental research. Lectures only.

BIOL 367 *Molecular Biology* (3 credits)

Prerequisite: BIOL 261; CHEM 271. DNA structure, recombination, gene structure, gene expression, and its regulation. The experimental evidence that supports these concepts is also discussed. Lectures and tutorials.

BIOL 368 *Genetics and Cell Biology Laboratory* (3 credits)

Prerequisite: BIOL 261, 266; CHEM 212 or 217 or BIOL 227. This course introduces students to the basic laboratory techniques of cell biology, microbiology, bacterial genetics, and molecular biology. Experiments include cell membrane functions in red blood cells, bacterial identification, mutagenesis, genetic transformation, gene mapping, DNA isolation and recombinant DNA techniques. Through tutorials, students learn the theory behind techniques and their use in research. Special focus is placed on lab manipulation skill, data organization, and data interpretation. Laboratory and tutorials.

BIOL 371 *Microbiology* (3 credits)

Prerequisite: Six credits chosen from BIOL 226, 261, CHEM 271; or permission of the Department. This course provides an in-depth study of the structure and function of microbes. It emphasizes the genetic and biochemical characteristics of microbes which distinguish them from plants and animals. Consideration is also given to the impact of microbes on the global environment and on the quality of human life. Lectures only.

BIOL 380 *Nutrition* (3 credits)

Prerequisite: CHEM 221, 271. The concept of a balanced diet is studied in relation to caloric content and to protein, lipid, carbohydrate, vitamin, and mineral requirements. The consequences of dietary deficiencies are examined. Special topics such as dieting, organic foods, vitamins, food additives, and toxins are discussed. Lectures only.

BIOL 381 *Environmental Toxicology* (3 credits)

Prerequisite: BIOL 225, 226. The purpose of this course is to study the impact of pollution on ecosystems. The major classes of pollutants are considered in relation to their nature, origin, and distribution, and particularly their mode of action on individual

organisms and ecosystems. Air, water, and soil are examined with their respective pollutants and a major emphasis is given to quantitative assessments of various agents and their effects. The course also includes theoretical and practical aspects of bio-assays, and an overview of case studies and of control measures. Lectures only.

BIOL 382 *Comparative Animal Physiology* (3 credits)

Prerequisite: BIOL 225, 226, 266. This course offers a comparative analysis of physiological processes across diverse animal groups at the cellular and systems levels. Topics include endocrinology, muscle contraction, sensory integration, nervous systems, respiration, digestion, and circulation. Lectures and laboratory.

BIOL 385 *Entomology* (3 credits)

Prerequisite: BIOL 225; BIOL 226 previously or concurrently, BIOL 227 recommended. This course introduces the student to the variety and complexity of insect life. Basic classification is followed by a more detailed study of morphology and anatomy, together with some physiological considerations. Other topics such as adaptations for aquatic life and social behaviour are discussed. Laboratories include the identification of insects collected by students, as well as structured laboratory sessions which complement the lectures. Lectures and laboratory.

BIOL 398 *Intermediate Topics in Biology* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

BIOL 443 *Plant Molecular Genetics* (3 credits)

Prerequisite: BIOL 367. This course analyzes plant genome structure, mRNA population complexity, gene-cloning strategies, gene transfer in plants, gene regulation, and a survey of topics such as signal transduction, plant disease resistance, herbicide resistance, metabolic engineering, and environmental stress resistance. Innovative applications of molecular analysis and genetic engineering in plants have had a dramatic impact on our basic understanding of plant growth and development, on genetic improvements of commercial varieties of crop plants, and on novel applications such as the production of pharmaceutical compounds, plastics and mammalian antibodies in plants. Lectures only.

BIOL 450 *Techniques in Ecology* (3 credits)

Prerequisite: BIOL 227, 322 or equivalent, and a minimum of six credits from BIOL 321, 350, 351, 353, 354. This course introduces students to a variety of techniques of experimental design, data collection, and quantitative analysis. Students participate in a series of modules, each of which presents experimental and analytical techniques appropriate for one area of modern research in ecology, behaviour, or evolution. Some modules require students to collect and subsequently analyze original data from field or laboratory settings. Modules and their contents may vary from year to year. Tutorials and laboratory.

BIOL 451 *Plant Field Ecology* (3 credits)

Prerequisite: BIOL 322 or equivalent, BIOL 353. This course is designed to give students practical experience working with plant communities. It is offered at a field station during the last two weeks of August, and residence is mandatory. Students learn to identify plant species occurring in field, forest, and mountain communities, with the aim of describing and understanding plant community patterns. Methods of sampling and statistical analysis of population and community data are discussed and applied. The course is a combination of formal lectures, organized field studies, and informal discussions. Students are required to hand in a series of written reports and a plant collection after the course has ended.

BIOL 452 *Population and Conservation Genetics* (3 credits)

Prerequisite: BIOL 261; three credits chosen from BIOL 321, 351, 353, 367. Conservation genetics employ the principles of population genetics and systematics to address problems related to conservation of biodiversity. This course examines the main factors that affect genetic variation within and among populations, including natural selection, random genetic drift, mutation and gene flow. The impact of human activities on levels and patterns of genetic variation in both plant and animal communities is discussed. The utility of molecular markers in determining conservation units is examined. Several case studies from the current literature are used to illustrate the many applications of modern molecular techniques in conservation genetics. The course comprises lectures, student presentations, and use of software in genetic data analysis.

BIOL 453 *Microbial Ecology* (3 credits)

Prerequisite: BIOL 353. This course examines the role of the microbial community in the fundamental processes of decomposition and nutrient cycling. We discuss the role of microbes in the breakdown of organic molecules and the release and transformation of mineral elements. Emphasis is placed on the interactions between bacteria, fungi, and the microfauna in decomposition and on the role of interactions between plants and microbes in the maintenance of nutrient cycles. Lectures only.

BIOL 457 *Applied Ecology and Conservation Biology* (3 credits)

Prerequisite: A minimum of nine credits chosen from BIOL 321, 350, 351, 353, 354. This course applies principles of ecology at the individual, population, community and ecosystem level to identify and solve practical environmental problems. Topics include pollution, climate change, farming, harvesting renewable resources, designing nature reserves and conserving biodiversity. Lectures and tutorials.

BIOL 459 *Aquatic Ecology* (3 credits)

Prerequisite: BIOL 322 or equivalent, BIOL 353. This course introduces the student to aquatic eco-systems. The first half of the course concentrates on the biological basis of primary and secondary productivity. The second half of the course explores the ecology of fishes at the individual, population, community, and ecosystem levels of analysis. Lectures, field trips, and laboratory.

BIOL 461 *Advanced Genetics* (3 credits)

Prerequisite: BIOL 367. Through lectures and directed readings in classical and contemporary genetics, students are exposed to research literature and problems in this area. Students probe in greater depth areas of particular interest in order to develop a critical sense and deepen an understanding of past and current work in this field. Lectures only.

BIOL 462 *Immunology* (3 credits)

Prerequisite: BIOL 266, 364, 367. The role of the immune system in maintenance of body homeostasis will be presented with particular reference to cells and tissues of the immune system, their organization as well as their structural and functional relationships. Topics include: maturation and differentiation of B and T lymphocytes; structure and properties of antibodies; immune responses to antigens; genetic aspects of anti-body synthesis; immunological considerations in AIDS, cancer, and autoimmune diseases. Lectures and seminars.

BIOL 463 *Comparative Genomics and Genome Evolution* (3 credits)

Prerequisite: BIOL 367. This course covers modern comparative genomics including the nature and scope of the various genome projects, gene discovery and data mining, molecular phylogenies, origin of the eukaryotic cell, evolution of gene regulatory networks, concerted evolution, and haplotype mapping. Lectures and seminars.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 466 *Advanced Techniques in Molecular Biology* (3 credits)

Prerequisite: BIOL 367, 368. This course covers the theory and practice of modern experimental procedures in molecular biology, including use of restriction enzymes, gene cloning and hybridizations, DNA sequencing, site-directed mutagenesis, RT-PCR, and yeast two-hybrid analysis. Laboratory and tutorials.

BIOL 467 *Advanced Cell Biology* (3 credits)

Prerequisite: BIOL 266, 364. This course examines selected topics in cell and molecular biology including the growth and division of differentiated and non-differentiated eukaryotic cells. The focus is on the control of cell cycling under normal and abnormal states, such as cancer and viral infection. Lectures only.

NOTE: Students who have received credit for BIOL 464 or this topic under a BIOL 498 number may not take this course for credit.

BIOL 468 *Gene Structure* (3 credits)

Prerequisite: BIOL 367. This course deals with gene regulation in eukaryotes. Topics covered include transcription, transcript processing, translation, and post-translational processes. Lectures only.

BIOL 470 *Microbial Physiology* (3 credits)

Prerequisite: BIOL 225, 226; CHEM 271. Comparative biochemistry of prokaryotes — a study of the biochemical activities underlying the life of micro-organisms. A description of the diverse biochemical adaptations used by micro-organisms to obtain energy and building materials from their various environments. Lectures and tutorials.

BIOL 472 *Virology* (3 credits)

Prerequisite: BIOL 266, 367. The life cycles of viruses are discussed with emphasis on the molecular basis of their entry into, reproduction in, and exit from host cells. These life cycles are related to the pathogenicity of different groups of viruses to provide an understanding of the variety of viral diseases.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 473 *Environmental Microbiology* (3 credits)

Prerequisite: BIOL 371 or 353. This course surveys microbial diversity and ecophysiology with emphasis on how the activities and interactions of individual organisms influence Earth systems at the ecosystem scale. Topics may include the origin and evolution of the biosphere, microbial interactions and ecosystems, nutrient cycling, molecular and genomic methods in environmental microbiology, microbial associations with plants and animals, and the application of microorganisms to environmental sustainability and bioremediation, human welfare, health, and biotechnology. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 474 *Cellular Neuroscience* (3 credits)

Prerequisite: BIOL 364. This course familiarizes students with current theory and research in cellular neuroscience through student presentations and discussions of original scientific literature. Topics include neural circuitry, brain genomics, neuronal structure, synaptic plasticity, neurotransmission, and molecular basis of neurological disease. Lectures only.

NOTE: Students who have received credit for this topic under a BIOL 498 number may not take this course for credit.

BIOL 480 *Bioinformatics* (3 credits)

Prerequisite: 60 credits in a Biology Department honours or specialization program and permission of the Department. This course provides the tools for life scientists to interpret and analyze biological sequence data. It provides a general overview of the growth in availability of genetic information. The course covers the genetic databases; the rapidly increasing number of genome databases, including the human genome database; the sequence homology search engines and search algorithms; software for the identification of structural sequence components; and the determination of evolutionary relationships between sequences. Lectures only.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 481 Structural Genomics (3 credits)

Prerequisite: BIOL 367; 60 credits in a Biology Department honours or specialization program and permission of the Department. This course provides an overview of genome analysis including cloning systems; sequencing strategies; methods of detecting genes and approaches to mapping genomes. It covers the theory and design of the different approaches, and the analysis of genomic data generated from them. Lectures only.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 482 Functional Genomics (3 credits)

Prerequisite: BIOL 367; 60 credits in a Biology Department honours or specialization program and permission of the Department. This course focuses on the functional analysis of expressed genes and their products. Course content includes the construction and screening of normalized cDNA libraries, analysis of expressed sequence tags (ESTs), functional analysis by gene knock-outs, localization of gene products by gene knock-ins, transcription profiling, systematic identification of proteins, and functional analysis of proteins by detection of protein-protein interactions. Lectures only.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 483 Biotechnology and Genomics Laboratory (3 credits)

Prerequisite: BIOL 368; 60 credits in a Biology Department honours or specialization program and permission of the Department. This is a hands-on course on techniques used in biotechnology and genomics. Experiments conducted in this course include separation and mapping of high molecular weight DNA fragments, shotgun sequencing, ESTs sequencing, protein production in bacteria and fungi, functional analysis of protein products, protein arrays, and in vivo detection of protein interactions.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 484 Industrial and Environmental Biotechnology (3 credits)

Prerequisite: BIOL 367; 60 credits in a Biology Department honours or specialization program and permission of the Department. This course provides an in-depth evaluation of current biotechnology tools used in pharmaceutical and forestry industries, and in environmental remediation. New technologies and genomic approaches that can be applied to these processes are also discussed. Lectures only.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 485 Agriculture and Agri-Food Biotechnology (3 credits)

Prerequisite: BIOL 367; 60 credits in a Biology Department honours or specialization program and permission of the Department. This course provides an overview on the use of biotechnology in agriculture and in the agri-food industry. Plant genomics and genetic manipulation of plants are emphasized. Also discussed are biotechnology methods used in reducing agricultural pollutants and converting agricultural surplus to energy. Lectures only.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 486 High-throughput Instrumentation (3 credits)

Prerequisite: 60 credits in a Biology Department honours or specialization program and permission of the Department. This is a hands-on introduction to high-throughput instruments used in biotechnology and genomics. Students are exposed to capillary electrophoresis-based DNA sequencing, microplate-based PCR reactions and purification of PCR products, construction of DNA chips, microarray scanning, and liquid handling robotics. Laboratory.

NOTE: This is primarily a graduate course with a limited number of places for undergraduate students depending upon availability.

BIOL 490 Independent Study (6 credits)

Prerequisite: 60 credits in an honours or specialization program in Biology, and permission of the Department. In this course, the student undertakes a special research project selected in consultation with, and conducted under, the supervision of a faculty member of the Department. The project is intended to develop the student's knowledge of standard scientific procedures, including methods of researching scientific literature, the planning and execution of experimental and analytical procedures, the writing of a formal report, and the presentation of a seminar on the project.

NOTE: Work in this course must be carried out over two consecutive terms: either summer and fall or fall and winter.

BIOL 498 Advanced Topics in Biology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty

Chair

JOANNE TURNBULL, PhD A.N.U., Associate Professor

Distinguished Professors Emeriti

MARK DOUGHTY, PhD Lond.

OSWALD S. TEE, PhD E.Anglia

Professors

PETER H. BIRD, PhD Sheff.

JOHN A. CAPOBIANCO, DSc Geneva

ANN M. ENGLISH, PhD McG.

PAUL JOYCE, PhD Dal.

MARCUS F. LAWRENCE, PhD Varennes

GILLES H. PESLHERBE, PhD Wayne State

Associate Professors

LOUIS CUCCIA, PhD McG.

GEORGE DÉNÈS, PhD Rennes

CHRISTINE DEWOLF, PhD Imp.Coll.Sci., Tech.&Med.

YVES GÉLINAS, PhD U.Q.A.M.

HEIDI M. MUCHALL, PhD Essen, Germany

XAVIER OTTENWAELDER, PhD Paris

PETER PAWELEK, PhD McG.

JUSTIN B. POWLOWSKI, PhD Minn.

CAMERON SKINNER, PhD McG.

CHRISTOPHER WILDS, PhD McG.

Assistant Professors

PAT FORGIONE, PhD Ott.

GUILLAUME LAMOUREUX, PhD Montr.

JUNG KWON (JOHN) OH, PhD Tor.

Senior Lecturers

SÉBASTIEN ROBIDOUX, PhD McG.

CERRIE ROGERS, PhD Br.Col.

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Richard J. Renaud Science Complex, Room: SP 201.01

514-848-2424, ext. 3366

Department Objectives

Chemistry is the science that examines the structure of substances and the reactions to produce novel and useful products.

Biochemistry is that part of chemistry which deals with chemical changes occurring in biologically relevant systems; i.e. changes taking place in living cells that are responsible for life processes.

The mission of the Department is fourfold: (i) excellence in teaching and research in the fields of chemistry and biochemistry; (ii) develop and maintain strong undergraduate and graduate teaching programs; (iii) develop and maintain state-of-the-art quality research; and (iv) meet the high standards of the scientific and industrial communities. Our programs have strength in both the applied and the theoretical fields.

Programs

Students are responsible for satisfying their particular degree requirements.

The Department helps students to ensure that they adhere to the academic code of conduct while taking the Department's courses. Attendance at a 45-minute seminar on academic integrity is required of all students registered in any department course. The seminar is offered several times near the beginning of each term.

The Ordre des chimistes du Québec (OCQ) has fully accredited the curricula of i) Honours in Chemistry; ii) Honours in Biochemistry; iii) Specialization in Biochemistry; iv) Specialization in Chemistry. Upon satisfactory completion of any of the above-mentioned programs, a graduate is eligible for membership in the OCQ. A working knowledge of French is required.

Students should note that CHEM 450 has a performance prerequisite and is essential for honours programs. CHEM 419 has a performance prerequisite for the specialization programs. Students who cannot meet these prerequisites will not be able to complete the programs but may complete a major. For more details, students should consult with the Department.

Courses that consist of both laboratories and lectures require that a satisfactory performance be obtained in each of the components for successful completion of the course.

The superscript indicates credit value.

45 Core Component for Chemistry

CHEM 217³, 218³, 221^{3*}, 222^{3*}, 234³, 235³, 241³, 242³, 271³, 312³, 324³, 325³, 333³, 341³, 393³

*For Cegep equivalents these courses must be replaced with an equivalent number of other Organic Chemistry credits.

45 Core Component for Biochemistry

BIOL 261³, 266³, 364³, 368³; CHEM 217³, 218³, 221^{3*}, 222^{3*}, 234³, 235³, 241³, 271³, 324³, 375³, 393³

*For students entering with the Cegep equivalents, these credits must be replaced with an equivalent number of other Organic Chemistry credits (for students in the specialization or honours) or with an equivalent number of credits in Chemistry or related disciplines, as approved by the departmental advisor (for students in the major).

BSc Honours in Chemistry

An Honours in Chemistry program consists of completion of the requirements of the Specialization in Chemistry with the election of CHEM 450⁶ as the senior research project.

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

Students must meet the University regulations concerning the honours degree. Honours students are encouraged to attend departmental seminars.

60 BSc Honours in Chemistry

45 Core component for Chemistry

3 CHEM 495³

6 CHEM 450⁶

6 Additional credits at the 400 level in Chemistry

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits. Students must meet the University regulations concerning the honours degree. Honours students in second year and beyond are encouraged to attend departmental seminars.

72 BSc Honours in Biochemistry

45 Core component for Biochemistry

3 CHEM 477³ or BIOL 466³

18 CHEM 312³, 325³, 335³, 450⁶; BIOL 367³

6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 475³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Chemistry or a 400-level course in Cell and Molecular Biology (BIOL 443³, 461³, 462³, 463³, 467³, 468³, 470³, 472³, and when appropriate, BIOL 498³).

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

Students must meet the University regulations concerning the honours degree. Honours students in second year and beyond are encouraged to attend departmental seminars.

60 BSc Specialization in Chemistry

45 Core component for Chemistry

3 CHEM 495³

6 CHEM 419⁶ or, with departmental permission, CHEM 450⁶

6 Additional credits at the 400 level in Chemistry

NOTE: Students in the specialization program must maintain a GPA of 2.00 or better in the core program, to be evaluated annually.

69 BSc Specialization in Biochemistry

45 Core component for Biochemistry

18 CHEM 312³, 325³, 335³, 477³; BIOL 367³, 466³

- 6 Credits of 400-level courses in the Biochemistry area (CHEM 470³, 471³, 472³, 475³, 478³, 481³, and when appropriate, CHEM 498³); three credits may be replaced by a 400-level course in Chemistry or by a 400-level course in Cell and Molecular Biology (443³, 461³, 462³, 463³, 467³, 468³, 470³, 472³, and when appropriate, BIOL 498³).

NOTE: CHEM 477³ or BIOL 466³ plus a non-biochemistry program elective can be replaced by CHEM 419⁶ or 450⁶.

NOTE: Students in the specialization program must maintain a GPA of 2.00 or better in the core program, to be evaluated annually.

45 BSc Major in Chemistry

- 45 Core component for Chemistry. Substitution of courses from within the Core program by other courses in Chemistry or related disciplines (Mathematics, Physics, Biology, Geology) up to a maximum of nine credits, will be accepted, if previously approved by a departmental program advisor. It is expected that such substitutions will be in accord with the overall program of study being followed by the student.

45 BSc Major in Biochemistry

- 45 Core component for Biochemistry

24 Minor in Chemistry

- 24 Chosen from the Department's offerings, with due regard to prerequisites, such that the courses chosen form a coherent pattern which complements the student's other areas of study. The course pattern chosen must have been previously approved by a departmental program advisor.

Chemistry and Biochemistry Co-operative Program

Director

MARCUS LAWRENCE, *Professor*

The Chemistry and Biochemistry co-operative program is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry and Biochemistry. Students interested in applying for the Chemistry and Biochemistry co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six study terms are interspersed with four work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education, in order to continue their studies in the co-op format.

Liaison between the student, the employers and the Institute for Co-operative Education is provided by the Chemistry and Biochemistry co-op committee, which includes the student's advisors.

Please refer to §24 for the schedule of study and work terms and the full description of admission requirements.

Courses

A student may be exempted from one or more of the introductory courses, on the basis of work done at the Cegep level. Where exemptions are given, replacement courses must be chosen with the approval of a department advisor. In the case of certain programs approved by the Ordre des chimistes du Québec, the courses must be replaced with an equivalent number of credits in the same subdiscipline as the exemptions.

Students who have successfully completed the Cegep equivalent for CHEM 205, 206, 221 and/or 222 should verify on their Concordia student record that they have received an exemption. Similarly, students who have successfully completed the equivalent course(s) at another university should verify on their Concordia student record that they have received credit or exemption as appropriate for this course. If not, they should see the departmental advisor.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CHEM 205 General Chemistry I (3 credits)

Stoichiometry, states of matter, atomic structure, electron structure of atoms, the periodic table, periodic properties, bonding, solids. Lectures and laboratory.

NOTE: This course presumes a good grounding in secondary-school mathematics. Students lacking such grounding or non-science students seeking only an awareness of chemistry are advised to enrol in CHEM 208.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

CHEM 206 General Chemistry II (3 credits)

Prerequisite: CHEM 205. Thermochemistry, solutions and their properties, equilibrium, ionic equilibrium, pH, buffers, kinetics, reaction mechanisms, other selected topics related to biochemistry, biology, and engineering. Lectures and laboratory.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

CHEM 208 Chemistry in Our Lives (3 credits)

This course is designed as an introduction to chemistry for non-science students. It concentrates on establishing the chemical concepts and vocabulary necessary to understand the many roles chemistry plays in people's daily lives. Issues to be presented will range from design and testing of drugs to protection of the ozone layer. The chemical phenomena, methodology, and theory

will be presented as needed to understand the various issues covered in the course. Lectures only.

NOTE: This course is not a prerequisite for any Chemistry course. This course may not be taken for credit by science students.

NOTE: Students who have received credit for CHEZ 208 may not take this course for credit.

CHEM 209 *Discovering Biotechnology* (3 credits)

The course begins with an exploration of the roles of genes and proteins in life processes. It then proceeds to an examination of the basic scientific principles behind manipulation of biological molecules to produce desired changes. Students are introduced to the specific applications of the technology to medicine, agriculture, and the environment. Economic and ethical issues raised by biotechnology are also examined.

NOTE: This course is intended for non-scientists, and may not be taken for credit by Biochemistry or Biology students.

NOTE: Students who have received credit for CHEZ 209 may not take this course for credit.

CHEM 212 *Analytical Chemistry for Biologists* (3 credits)

Prerequisite: CHEM 205, 206; PHYS 204, 206, 224, 226; MATH 205; or equivalents for **all** prerequisite courses. This course introduces the basic concepts of analytical chemistry to students in the biological sciences. Topics include treatment of analytical data; chemical equilibria and titrations; introduction to spectroscopy; separation science; electrochemistry. Lectures and laboratory.

NOTE: This course may not be taken for credit by students registered in a Chemistry or Biochemistry program.

CHEM 217 *Introductory Analytical Chemistry I* (3 credits)

Prerequisite: CHEM 205, 206; PHYS 204, 206, 224, 226; MATH 203, 205; or equivalents for **all** prerequisite courses. Precipitation methods and solubility products; activity, chemical equilibria and titration curves of neutralization and complexation systems; treatment of analytical data. Lectures and laboratory.

CHEM 218 *Introductory Analytical Chemistry II* (3 credits)

Prerequisite: CHEM 217. Chemical equilibria and titration curves of oxidation-reduction, precipitation, and non-aqueous systems; potentiometry and potentiometric titrations; introduction to spectroscopy with emphasis on molecular and atomic absorption spectroscopy, fluorescence spectroscopy. Lectures and laboratory.

CHEM 221 *Introductory Organic Chemistry I* (3 credits)

Prerequisite: CHEM 205, 206. Basic aspects of orbitals and their role in covalent bonding; delocalization of electrons. Alkanes: structure, nomenclature, isomerism, reactions. Introductory stereochemistry: enantiomers, diastereomers, conformers, Fischer and Newman projections, specification of chirality, E/Z isomerism. Conformations of cyclic compounds. Alkylhalides: S_N1; S_N2; E1; E2 reaction mechanisms. Free-radical reactions, organometallic compounds. Chemistry of alkenes, alkynes, and dienes. Lectures and laboratory.

CHEM 222 *Introductory Organic Chemistry II* (3 credits)

Prerequisite: CHEM 206, 221. Introduction to the use of IR and NMR spectroscopy for the identification of simple organic compounds. Benzene and aromatic compounds: aromaticity, electrophilic aromatic substitution, nucleophilic aromatic substitution, substituent effects. Chemistry of aldehydes and ketones: nucleophilic addition, oxidation, reduction, and condensation reactions, tautomerism. Chemistry of carboxylic acids and their derivatives. Chemistry of alcohols, ethers, and related compounds. Amines: basicity, reactions. Lectures and laboratory.

CHEM 234 *Physical Chemistry I: Thermodynamics* (3 credits)

Prerequisite: CHEM 205, 206; PHYS 204, 206, 224, 226; MATH 203, 205; or equivalents for **all** prerequisite courses. The properties of real gases; fugacities; first, second and third laws of thermodynamics; the Phase Rule; one- and two-component systems; real solutions, and partial molal properties. Lectures, problem assignments, and assigned readings.

CHEM 235 *Physical Chemistry: Kinetics of Chemical Reactions* (3 credits)

Prerequisite: CHEM 234. Mathematical treatment of experimental results; theories of reaction rates; unimolecular reactions; the steady-state approximation; factors influencing rates of reactions in solution; acid-base catalysis; catalysis by enzymes and the Michaelis-Menten mechanism; free-radical reactions; photochemical reactions; experimental methods and techniques. Lectures and laboratory.

CHEM 241 *Inorganic Chemistry I: Introduction to Periodicity and Valence Theory* (3 credits)

Prerequisite: CHEM 205, 206; PHYS 204, 206, 224, 226; MATH 203, 205; or equivalents for **all** prerequisite courses. The structure of the atom; the periodic table; properties of atoms, covalent bonding treatments including Lewis theory, valence shell electron pair repulsion theory of structure, valence bond and molecular orbital theory. Crystal field theory applied to the structure and properties of transition metal complexes. Bonding theories of metallic materials and semi-conductors. Lectures and laboratory.

CHEM 242 *Inorganic Chemistry II: The Chemistry of the Main Group Elements* (3 credits)

Prerequisite: CHEM 241. A survey of the properties and reactions of: hydrogen; Group 1, lithium to cesium; and Group 2, beryllium to radium; including the theory of ionic bonding and structure. The descriptive chemistry of Group 13, boron to thallium; Group 14, carbon to lead; Group 15, nitrogen to bismuth; Group 16, sulphur to polonium; Group 17, the halogens; and Group 18, the chemistry of the noble gases. Lectures and laboratory.

CHEM 271 *Biochemistry I* (3 credits)

Prerequisite: CHEM 221. An introduction to the essentials of biochemistry: protein structure, enzymology, carbohydrate metabolism, electron transport, integration and regulation of metabolism. Lectures, tutorials and laboratory.

CHEM 298 *Selected Topics in Chemistry* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 312 *Intermediate Analytical Chemistry* (3 credits)

Prerequisite: CHEM 217; CHEM 218. A continuation of CHEM 217 and 218, with emphasis on instrumental methods of analysis. Emission spectroscopy; X-ray spectroscopy; voltammetry and polarography; amperometric titrations; coulometry and coulometric titrations, conductometry; chromatography with particular emphasis on gas chromatography, and high performance liquid chromatography. Laboratory is taken concurrently and provides experience in analytical techniques described in lectures. Lectures and laboratory.

CHEM 324 *Organic Chemistry III: Organic Reactions* (3 credits)

Prerequisite: CHEM 221, 222, 234; CHEM 235 previously or concurrently. A mechanistic survey of reactions of major synthetic utility. Determination of reaction mechanisms. Importance of reactive intermediates: carbocations, carbanions, radicals, and carbenes. Lectures and laboratory.

CHEM 325 *Organic Chemistry IV: Organic Structure and Stereochemistry* (3 credits)

Prerequisite: CHEM 221, 222. Organic structure and stereochemistry including the relationship of stereochemistry to physical properties and chemical reactivity. Determination of organic structure and stereochemistry by chemical and spectroscopic means. Introduction to molecular symmetry. Lectures and laboratory.

CHEM 326 *Natural Products* (3 credits)

Prerequisite: CHEM 222, 235; CHEM 324 previously or concurrently. The structures, mechanisms of action, and biosynthetic origins of biologically important compounds such as fatty acids, polyketides, terpenes, steroids, alkaloids, and beta-lactam antibiotics are discussed. The role of traditional organic chemistry in the development of modern biochemistry and biotechnology is illustrated with examples from medicine and agriculture. Lectures only.

CHEM 327 *Organic Chemistry of Polymers* (3 credits)

Prerequisite: CHEM 221, 222, 235. Introduction to the fundamental aspects of polymers and polymerization. Methods of preparation, reaction mechanisms and kinetics of polymer synthesis including condensation polymerization; addition polymerization: free radical, anionic, cationic; heterogeneous (Ziegler-Natta) and homogeneous (metallocenes) coordination polymerization. Polymer characterization and uses. Lectures and problem sessions.

CHEM 333 *Introduction to Quantum Theory* (3 credits)

Prerequisite: CHEM 234, 241. The course introduces students to the concept of quantum mechanics and the electronic structure of atoms and molecules. Topics include the origins and postulates of quantum theory, the Schrödinger equation and applications to simple systems such as the harmonic oscillator, rigid rotor and the hydrogen atom. The course looks at the quantum mechanical treatment of the chemical bond and provides an introduction to spectroscopy. Lectures only.

CHEM 334 *Physical Chemistry: Laboratory* (3 credits)

Prerequisite: CHEM 234, 235. A series of experiments illustrating modern techniques for the examination of solids, liquids, and gases. Some experiments may include the automated collection and computerized analysis of data. Laboratory only.

CHEM 335 *Biophysical Chemistry* (3 credits)

Prerequisite: CHEM 222, 234, 235, 271. This course examines the physical basis for the structures of biomolecules (energetics of protein folding), the organization and structures of bio-membranes and biologically relevant systems, and intermolecular interactions (e.g. ligand binding). Both fundamental theory and techniques used to characterize these physical properties are covered. Lectures and laboratory.

CHEM 341 *Inorganic Chemistry III: The Transition Metals* (3 credits)

Prerequisite: CHEM 217, 218, 241, 242. Theories of bonding in transition metal complexes, including ligand field theory, applied to structure, physical properties, and reactivity of transition metal complexes: organometallic chemistry and catalysis. Metals in biological systems. Lectures and laboratory.

CHEM 375 *Biochemistry II* (3 credits)

Prerequisite: CHEM 221, 222, 271. A survey of selected pathways in intermediary metabolism, including their regulation and physiological significance, lipid, amino acid and nucleoside metabolism, cholesterol biosynthesis, urea cycle and the biochemistry of protein synthesis. Lectures and laboratory.

CHEM 393 *Spectroscopy and Structure of Organic Compounds* (3 credits)

Prerequisite: CHEM 221, 222. This course examines the identification of organic compounds using methods based on electronic, vibrational, nuclear magnetic resonance and mass spectroscopies. In each case, there is an introduction to the principles of the spectroscopy and a discussion of how its spectra vary with structure. Particular emphasis is placed upon the UV-visible spectra of conjugated molecules; the identification of functional groups by IR spectroscopy; the use of NMR spectroscopy, including 2D methods, for the determination of stereochemistry; and the use of mass spectrometry for ascertaining molecular constitution. The use of computer simulation and information retrieval for structure determination is introduced. Lectures and laboratory.

CHEM 398 *Selected Topics in Chemistry* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CHEM 415 *Analytical Separations* (3 credits)

Prerequisite: CHEM 218, 312. High performance liquid separations on an analytical (non-preparative) scale are surveyed. Fundamental separation mechanisms and application of the techniques are discussed. Emphasis is placed on separations of biologically relevant analytes which include peptides, proteins and nucleic acids. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 419 *Independent Study and Practicum* (6 credits)

Prerequisite: Must have completed the 45-credit Core program, or equivalent, with a GPA of 2.00 (C) or better. In collaboration with and under the direction of a member of Faculty, the student carries out independent study and practical work on a problem chosen from the student's area of concentration. The student presents his or her work to the Department in the form of a scientific poster and submits a written report to the supervisor.

NOTE: During the academic session before the one in which this project is to be undertaken, the student must have obtained the consent of the Department, by consultation with the CHEM 419 coordinator, and must have also been accepted by a faculty supervisor. Independent study and practical work.

CHEM 421 *Physical Organic Chemistry* (3 credits)

Prerequisite: CHEM 222, 235; CHEM 324 or 325. Determination of organic reaction mechanisms using kinetics, activation parameters, acid-base catalysis, Bronsted catalysis law, solvent effects, medium effects, isotope effects, substituent effects, and linear free energy relationships. Lectures only.

CHEM 424 *Organic Synthesis* (3 credits)

Prerequisite: CHEM 222, 235, 324. This course is concerned with synthetic strategy and design. It provides an introduction to advanced synthetic methods and reagents, involving heteroatoms such as sulphur, phosphorus, tin and selenium, as well as an overview of the uses of protecting groups in organic chemistry. The concept of retrosynthesis and a few asymmetric reactions are discussed using syntheses of natural products from the literature as examples.

CHEM 425 *Nucleic Acid Chemistry* (3 credits)

Prerequisite: CHEM 221, 222, 271. This course introduces students to various topics in nucleic acid chemistry. The topics include nomenclature, structure and function of RNA and DNA; techniques and methods to investigate nucleic acid structure; DNA damage and repair; interaction of small molecules and proteins with nucleic acid; oligonucleotide-based therapeutics (antisense, antigene, RNAi); synthesis of purines, pyrimidines and nucleosides; and solid-phase oligonucleotide synthesis. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 426 *Reactive Intermediates* (3 credits)

Prerequisite: CHEM 324, 325. This course offers an introduction to reactive intermediates with an emphasis on structure and stability as found in modern (physical) organic chemistry. While the focus is on radicals and carbenes, carbocations are discussed near the end of the term. The material covered is relevant to chemistry and biochemistry. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 427 *Supramolecular Chemistry* (3 credits)

Prerequisite: CHEM 324 or 325; CHEM 335; or permission of the Department. Supramolecular chemistry is the chemistry of the intermolecular bond, i.e. "chemistry beyond the molecule." This course reviews some fundamental aspects of synthetic and biological supramolecular chemistry and nanotechnology. Topics covered may include supramolecular forces, ion binding and ion channels, molecular recognition, self-assembly (meso-scale and molecular-scale), organometallic supramolecular chemistry, dynamic combinatorial chemistry (DCC), and foldamers. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 431 *Computational Chemistry for Chemists and Biochemists* (3 credits)

Prerequisite: CHEM 234, 241, 333 or permission of the Department. This course presents the concepts, tools, and techniques of modern computational chemistry, and provides a very broad overview of the various fields of application across chemistry and biochemistry. The course is divided into two parts: 1) *Molecular structure*, which covers molecular mechanics and elementary electronic structure theory of atoms and molecules; and 2) *Chemical reactivity*, which covers applications of quantum chemistry and molecular dynamics techniques to studies of chemical reactions. The applications discussed include organic molecules and their reactions, peptides and proteins, drug design, DNA, polymers, inorganics, and materials. The course includes a practical component where students acquire hands-on experience with commonly used computational chemistry computer software. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 435 *Interfacial Phenomena* (3 credits)

Prerequisite: CHEM 234, 235. This course examines the physical chemistry of interfaces including surface and interfacial tensions, the absorption of surface active substances/surface excess properties, and surfactant self-assembly. Topics covered may include Gibbs and Langmuir monolayers, micelle formation, emulsions, foams, surfactant liquid crystals, layer-by-layer

polymer self-assembly, and biological membranes. Techniques for characterization and applications (biological and industrial) of these systems are addressed. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 436 Molecular Modelling of Proteins (3 credits)

Prerequisite: CHEM 234, 271. This course offers a hands-on introduction to the computer tools used to predict the structure of a protein from its amino acid sequence, and to gain insight into its function. Students learn modelling techniques such as sequence alignment, homology modelling, computer visualization, molecular dynamics, and molecular docking. Computer laboratory with pre-lab lectures.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 443 Organometallic Chemistry (3 credits)

Prerequisite: CHEM 324, 341, or equivalent. This course covers the structure and properties of organometallic compounds, their main reactions and their application in catalysis and organic chemistry. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 445 Industrial Catalysis (3 credits)

Prerequisite: CHEM 234, 235. Basic and recent concepts in catalysis are described with particular emphasis on heterogeneous catalysis. The technical, economic and environmental aspects of industrial catalysis are covered. The processes to be studied are chosen from the petroleum industry, the natural gas and coal processing industry, and the production of thermoplastics and synthetic fibres. The course ends with a rapid survey of problems associated with the treatment of industrial pollutants and with catalytic converters. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 450 Research Project and Thesis (6 credits)

Prerequisite: 60 credits including the 45-credit Core program, or equivalent and enrolment in Honours in Chemistry; or Biochemistry, with a program GPA of 3.3 or better; or written permission of the Department. The student works on a research project in the student's area of concentration, selected in consultation with and conducted under the supervision of a faculty member of the Department. The student writes a thesis on the results and defends it before a departmental committee.

NOTE: During the academic session before the one in which this project is to be undertaken, the student must have obtained the consent of the Department, by consultation with the CHEM 450 coordinator, and must have also been accepted by a faculty supervisor.

CHEM 451 Nanochemistry (3 credits)

Prerequisite: CHEM 217, 218, 221, 222, 234, 235, 241. This modular course covers the areas of production, characterization and applications of nanoscale structures and materials. Each module is taught by a different professor as well as guest lecturers. Topics may include (but are not limited to) size dependent properties, synthesis of organic and inorganic nanostructures, self-assembled structures, chemical patterning and functional nanopatterns, biomaterials. Nanometer scale fabrication techniques such as lithographic methods, nano-stamping and patterned self-assembly are discussed. Modern analysis techniques such as atomic force microscopy and electron microscopy, which are used to map and measure at the single molecule level, are introduced. Applications such as photonics, optical properties, biodetection and biosensors, micro- and nano-fluidics, nanoelectronics and nanomachines are presented. The course includes a term project carried out using the nanoscience facilities held in the Department research labs.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 458 Aquatic Biogeochemistry (3 credits)

Prerequisite: CHEM 217, 218, 312. The major aim of this course is to present a quantitative treatment of the variables that determine the composition of natural waters. Chemical equilibrium is the central theme of the course, but consideration is also given to kinetics, steady-state and dynamic models. Related themes include global chemical cycles, air and water pollution, as well as current research topics in water chemistry and chemical oceanography. Lectures only.

NOTE: Students who have received credit for CHEM 418 or for this topic under a CHEM 498 number may not take this course for credit.

CHEM 470 Environmental Biochemistry (3 credits)

Prerequisite: CHEM 271, 375; BIOL 367; or permission of the Department. This course examines the biochemical effects of environmental stresses on organisms, and adaptations that allow organisms to face these stresses. Emphasis is placed on biochemical responses to toxic compounds such as aromatics, halogenated aliphatics, drugs, and heavy metals. Other topics may include adaptations to stresses such as temperature extremes, pathogens, and ionizing radiation. Applications to related biotechnological processes are also considered.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 471 Enzyme Kinetics and Mechanism (3 credits)

Prerequisite: CHEM 271, 375. Steady-state kinetics, including the use of initial velocity studies and product inhibition to establish a kinetic mechanism; nonsteady-state kinetics, isotope effects, energy of activation, detailed mechanisms of selected enzymes. Lectures only.

CHEM 472 *Chemical Toxicology* (3 credits)

Prerequisite: CHEM 222, 271. Introduction to the general principles of toxicology with emphasis on the toxic effects of chemicals in humans. Dose-response relationship, types and routes of exposure, absorption and disposition of toxic substances, toxicokinetics, types of toxic response, and factors affecting toxic response. Toxicity testing, risk assessment, and interpretation of toxicological data. Lectures only.

CHEM 473 *Neurochemistry* (3 credits)

Prerequisite: BIOL 364; CHEM 271. Students examine the bioelectrical properties of neurons and how they may undergo marked changes — changes that are necessary for the cells to carry out their functions; neuromodulation, which is the ability of neurons to alter their electrical properties in response to intracellular biochemical changes caused by neurotransmitters or hormones; two changes in animal behaviour that arise from neuromodulation and synaptic plasticity — learning and memory; and drug addiction. The material covered includes cellular neurobiology, structure and function of various families of membrane receptor and ion channel proteins, communication between neurons and signalling in the brain. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 475 *Protein Engineering and Design* (3 credits)

Prerequisite: CHEM 271, 375. This course examines the principles behind protein design, how techniques of protein engineering are used, and the methods used to assess protein properties. Examples include studies of protein stability, structure-function relationships, and applications to drug design. Lectures only.

CHEM 476 *Structure and Function of Biomembranes* (3 credits)

Prerequisite: BIOL 266; CHEM 375. This course discusses what is known about how the membranes of biological organisms are assembled and the roles that these membranes play in a number of important processes. Emphasis is placed on the transport of proteins to and through biomembranes and the roles that membranes play in metabolite and ion transport. Where applicable, the significance of these processes is illustrated by examining the roles of membranes in health and disease. Lectures only.

NOTE: Students who have received credit for this topic under a CHEM 498 number may not take this course for credit.

CHEM 477 *Advanced Laboratory in Biochemistry* (3 credits)

Prerequisite: CHEM 271, 375. Theory and practice of techniques in enzymology and protein chemistry, including steady-state and stopped-flow enzyme kinetics, ligand binding, immunological techniques, proteomics, computer modelling, and chemical modification of proteins. Tutorials and laboratory.

CHEM 478 *Hormone Biochemistry* (3 credits)

Prerequisite: CHEM 271, 375. This course deals with an in-depth study of the vertebrate hormones and involves a study of the precise chemical structure and properties of each hormone, its biosynthesis and mode of secretion from the cell. The circulating form of the hormone is examined, as well as the nature of the hormone receptor. The cellular mechanism of action and the relationship of the hormone's action to the intact animal are investigated. Lectures only.

CHEM 481 *Bioinorganic Chemistry* (3 credits)

Prerequisite: CHEM 271, 241. Role of metals in biochemical systems. Essential trace elements, zinc enzymes, oxygen transport and storage, metalloproteins and biological electron transfer, structure-function relationships in heme enzymes, nitrogen fixation; model compounds for metallo-proteins and metalloenzymes. Lectures only.

CHEM 493 *Magnetic Resonance Spectroscopy* (3 credits)

Prerequisite: CHEM 222, 393. This course is designed to provide the background in magnetic resonance theory necessary to understand modern high-resolution NMR experiments and instrumentation. The basic theory in the introductory section also applies to electron spin resonance (ESR). Relaxation and through-bond and through-space interactions, and experiments to investigate them are considered. Spin manipulations and behaviour in multiple-pulse, Fourier transform NMR techniques used for common spectral editing and two-dimensional experiments are discussed. Lectures only.

CHEM 494 *Mass Spectrometry* (3 credits)

Prerequisite: CHEM 218, 222, 271. Production and interpretation of mass spectra. Topics include ionization methods (electron impact, chemical ionization and fast-atom bombardment); interpretation of mass spectra; introduction to quantitative analysis by mass spectrometry. Lectures only.

CHEM 495 *Modern Spectroscopy* (3 credits)

Prerequisite: CHEM 234, 241, 333. This course demonstrates how quantum theory applies to the measurement of absorption and emission spectra of atoms and molecules. The course examines rotational, vibrational, and electronic spectroscopy. Photoelectron and related spectroscopies. Lasers and laser spectroscopy. Lectures only.

CHEM 498 *Advanced Topics in Chemistry* (3 credits)**CHEM 499 *Advanced Topics in Chemistry* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty*Chair*

MARK HALE, PhD Harv., Professor (Linguistics)

Professors

CHARLES REISS, PhD Harv. (Linguistics)

LADY ROJAS-BENAVENTE, PhD Laval (Spanish)

LIONEL J. SANDERS, PhD McM. (Classics)

ANNETTE TEFFETELLER, PhD McG. (Linguistics)

CATHERINE VALLEJO, PhD Montr. (Spanish)

Associate Professors

M. CATHERINE BOLTON, PhD McM. (Classics)

DARIO BRANCATO, PhD Tor. (Italian)

ANTHONY COSTANZO, MA Wash. (Italian)

JANE E. FRANCIS, PhD Bryn Mawr (Classics)

JOSÉ ANTONIO GIMÉNEZ-MICÓ, PhD Montr. (Spanish)

SEAN GURD, PhD Tor. (Classics)

DANIELA ISAC, PhD Buch. (Linguistics)

MADELYN J. KISSOCK, PhD Harv. (Linguistics)

BRADLEY J. NELSON, PhD Minn. (Spanish)

M. GORETTI RAMÍREZ, PhD Brown (Spanish)

FILIPPO SALVATORE, PhD Harv. (Italian)

ROBERTO VIERECK SALINAS, PhD Madrid (Spanish)

BRUNO VILLATA, PhD Laval (Italian)

Assistant Professors

ALAN C. BALE, PhD McG. (Linguistics)

MIRIAM DÍAZ, PhD Ariz. (Spanish)

Senior Lecturers

LIAN DUAN, PhD Hunan (Chinese)

LUIS OCHOA, MA McG., MA Salamanca (Spanish)

Lecturers

ELENA BENELLI, PhD Montr. (Italian)

RASHA EL HAWARI, PhD Alexandria (Arabic)

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: H 663

514-848-2424, ext. 2310

Department Objectives

Classics programs have two related aims: first, to provide a solid background to the cultures of ancient Greece and Rome through written documents, including historical and literary sources, and archaeological evidence; and second, to train students to read and interpret texts in ancient Greek and Latin.

The Modern Language programs provide a stimulating intellectual milieu for learning and strengthening skills in critical thinking, language proficiency, intercultural understanding, literary studies and contemporary approaches to modern languages and cultures, particularly Spanish, Italian, German, Modern Arabic, and Modern Chinese. Linguistics is the scientific study of the human language faculty. Teaching and research in the Linguistics programs focus on two areas: linguistics as a branch of cognitive science, encompassing fields such as syntax, phonology and language acquisition; and the nature of language change, with particular emphasis on the Indo-European language family.

Programs

The Department of Classics, Modern Languages and Linguistics offers undergraduate programs leading to the BA degree in Classics, Italian, Spanish, and Linguistics. In addition, it offers Minor and Certificate programs in German, Modern Arabic Language and Culture, and Modern Chinese Language and Culture.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

All these programs can normally be completed within the regular three-year university sessions.

Classics

60 BA Honours in Classics

36 *Honours Core consisting of:*

9 Chosen from CLAS 211³, 212³, 320³, 330³

6 CLAS 280⁶ or 290⁶

6 CLAS 383³ and 384³, or 391³ and 392³

3 Chosen from CLAS 230³, 240³, 242³, 341³, 343³

3 CLAS 261³ or 262³

3 Chosen from CLAS 221³, 222³, 263³, 266³, 267³, 353³, 364³, 365³, 369³

6 CLAS 450³, 451³

Concentration in Classical Languages and Literature

36 Honours Core (see above)

6 CLAS 280⁶ or 290⁶

6 CLAS 383³ and 384³, or 391³ and 392³

6 CLAS 410³ and 411³, or 420³ and 421³

6 Linguistics courses chosen in consultation with the Department

Concentration in Classical Civilization

36 Honours Core (see above)

9 Chosen from CLAS 230³, 240³, 242³, 341³, 343³

6 Chosen from CLAS 263³, 266³, 364³, 365³, 369³, 370³

3 Chosen from CLAS 221³, 222³, 261³, 262³, 353³

6 Credits in either Classics or another subject chosen in consultation with the Department

42 BA Major in Classics

18 *Major Core consisting of:*

9 Chosen from CLAS 211³, 212³, 320³, 330³

3 Chosen from CLAS 221³, 222³, 230³, 240³, 242³, 341³, 343³

3 CLAS 261³ or 262³

3 Chosen from CLAS 263³, 266³, 267³, 353³, 364³, 365³, 369³

Concentration in Classical Languages and Literature

18 Major Core (see above)

6 CLAS 280⁶ or 290⁶

6 CLAS 383³ and 384³, or 391³ and 392³

6 CLAS 410³ and 411³, or 420³ and 421³

6 CLAS 280⁶ or 290⁶, or other Linguistics courses chosen in consultation with the Department

Concentration in Classical Civilization

18 Major Core (see above)

9 Chosen from CLAS 221³, 222³, 230³, 240³, 242³, 341³, 343³

6 Chosen from CLAS 263³, 266³, 267³, 364³, 365³, 369³, 370³

3 Chosen from CLAS 261³, 262³, 353³

6 Credits in either Classics or another subject chosen in consultation with the Department

24 Minor in Classical Languages and Literature

12 CLAS 211³, 212³, 320³, 330³

12 Chosen from CLAS 280⁶, 290⁶, 383³, 384³, 391³, 392³

24 Minor in Classical Civilization

6 Chosen from CLAS 211³, 212³, 320³, 330³

6 Chosen from CLAS 230³, 240³, 242³, 341³, 343³

12 Chosen from CLAS 221³, 222³, 261³, 262³, 263³, 266³, 267³, 280⁶, 290⁶, 353³

24 Minor in Classical Archaeology

- 3 CLAS 266³
- 6 Chosen from CLAS 230³, 240³, 242³, 341³, 343³
- 9 Chosen from CLAS 263³, 267³, 364³, 365³, 369³, 370³
- 6 Credits in either Classics or another subject chosen in consultation with the Department

Arabic (Modern Standard)

30 Minor in Modern Arabic Language and Culture

- 18 MARA 205⁶, 206⁶, 240⁶
- 3 MARA 365³
- 9 Chosen from MARA 301³, 308³, 310³, 398³; FLIT 362³; HIST 242³; POLI 391³, 395³; RELI 224³, 316³, 318³, 319³

30 Certificate in Modern Arabic Language and Culture

- 18 MARA 205⁶, 206⁶, 240⁶
- 3 MARA 365³
- 9 Chosen from MARA 301³, 308³, 310³, 398³; FLIT 362³; HIST 242³; POLI 391³, 395³; RELI 224³, 316³, 318³, 319³

Chinese (Mandarin)

30 Minor in Modern Chinese Language and Culture

- 21 MCHI 205⁹, 206⁶, 240⁶
- 9 Chosen from MCHI 250³, 306³, 308³, 310³, 311³, 365³, 366³, 398³, 399⁶; HIST 262³, 367³; POLI 335³; RELI 360³

30 Certificate in Modern Chinese Language and Culture

- 21 MCHI 205⁹, 206⁶, 240⁶
- 9 Chosen from MCHI 250³, 306³, 308³, 310³, 311³, 365³, 366³, 398³, 399⁶; HIST 262³, 367³; POLI 335³; RELI 360³

German

60 BA Honours in German*

- 12 GERM 240⁶, or 241³ and 242³; 256³, 257³
- 24 GERM 271³, 301³, 302³, 306³, 307³, 308³, 365³, 366³
- 21 Credits chosen from 400-level courses in German, of which at least six credits must be from GERM 405³, 406³, 461³, 462³
- 3 GERM 490³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

**Admission suspended for 2013-14.*

42 BA Major in German*

- 12 GERM 240⁶, or 241³ and 242³; 256³, 257³
- 15 Credits chosen from GERM 271³, 301³, 302³, 306³, 307³, 308³, 365³, 366³
- 15 Credits chosen from 400-level courses in German, of which at least six credits must be from GERM 405³, 406³, 461³, 462³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

**Admission suspended for 2013-14.*

30 Minor in German

- 3 GERM 230³ or 231³
- 18 Credits chosen from GERM 200⁶, or 201³ and 202³; 240⁶, or 241³ and 242³; 270³; 301³; 308³; 310³ or 311³; 361³ or 362³; 398³
- 9 Credits chosen from GERM 302³; 306³; 307³; 308³; 310³ or 311³; 361³ or 362³; 398³; 410³; 420³; 498³; of which at least three credits must be at the 400 level

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

Italian

60 BA Honours in Italian

- 6 ITAL 240⁶, or ITAL 241³ and 242³
- 12 Credits chosen from ITAL 301³, 302³, 310³, 311³, 365³, 366³
- 39 Credits in an approved sequence chosen from courses higher than ITAL 302
- 3 ITAL 490³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Italian

- 6 ITAL 240⁶, or ITAL 241³ and 242³
- 12 Credits chosen from ITAL 301³, 302³, 310³, 311³, 365³, 366³
- 24 Credits in an approved sequence chosen from courses higher than ITAL 302

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Italian

- 30 Credits in Italian

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

Spanish

60 BA Honours in Spanish (Literature and Society)

- 15 SPAN 240⁶ (or 241³ and 242³), 301³, 302³, 303³
- 15 Credits chosen from SPAN 310³, 311³, 320³, 321³, 362³, 363³, 365³
- 12 Credits chosen from SPAN 406 to 472, excluding SPAN 464 and 465
- 6 Credits chosen from courses higher than SPAN 308, excluding SPAN 464, 465, and 474
- 6 SPAN elective credits at the 400 level, excluding SPAN 464, 465, and 474
- 6 SPAN 490³, 491³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

60 BA Specialization in Spanish (Expression and Culture)

- 15 SPAN 240⁶ (or 241³ and 242³), 301³, 302³, 303³
- 15 Credits chosen from SPAN 310³, 311³, 320³, 321³, 362³, 363³, 365³
- 9 Credits chosen from Group B (SPAN 446 to 474)
- 12 Credits chosen from courses higher than SPAN 303
- 6 SPAN elective credits at the 400 level
- 3 SPAN 495³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

42 BA Major in Spanish

Option A: Literature and Society

- 15 SPAN 240⁶ (or 241³ and 242³), 301³, 302³, 303³
- 9 Credits chosen from SPAN 310³, 311³, 320³, 321³
- 6 Credits chosen from SPAN 362³, 363³, 365³
- 9 Credits chosen from SPAN 406 to 472, excluding 464 and 465
- 3 SPAN elective credits at the 400 level excluding SPAN 464, 465, and 474

Option B: Expression and Culture

- 15 SPAN 240⁶ (or 241³ and 242³), 301³, 302³, 303³
- 6 Credits chosen from SPAN 310³, 311³, 320³, 321³
- 9 Credits chosen from SPAN 306³, 307³, 362³, 363³, 365³
- 9 Credits chosen from Group B (SPAN 446 to 474)
- 3 SPAN elective credits at the 400 level

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

30 Minor in Spanish

- 18 SPAN 200⁶ (or 201³ and 202³), 240⁶ (or 241³ and 242³), 301³, 303³
- 12 Credits chosen from all other courses above SPAN 301, of which three credits must be at the 400 level

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

33 Minor in Spanish Translation

- 18 SPAN 200⁶ (or 201³ and 202³), 240⁶ (or 241³ and 242³), 301³, 303³
- 12 SPAN 306³, 307³, 473³, 474³
- 3 Credits chosen from SPAN 362³, 363³, 365³

NOTE: Upon consultation with the Department, advanced students may not be required to take any courses at the 200 level.

Linguistics

21 Core Program

- 21 LING 200³, 222³, 315³, 336³, 372³, 373³, 420³

60 BA Honours in Linguistics

- 21 Core Program
- 3 Credits chosen from LING 320³, 353³, 380³
- 9 LING 421³, 425³, 475³
- 9 Credits chosen from LING 415³, 429³, 436³, 437³, 473³
- 3 Credits chosen from LING 330³, 446³, 447³, 456³, 457³, 461³
- 12 Additional LING credits (in consultation with the Department, related courses in other disciplines may be counted as satisfying this part of the requirement)
- 3 LING 490³

42 BA Major in Linguistics

- 21 Core Program
- 3 Credits chosen from LING 320³, 353³, 380³
- 6 Credits chosen from LING 415³, 421³, 425³, 429³, 473³, 475³

- 6 Credits chosen from LING 330³, 436³, 437³, 446³, 447³, 456³, 457³, 461³
 6 Additional LING credits (in consultation with the Department, related courses in other disciplines may be counted as satisfying this part of the requirement)

- 24 Minor in Linguistics**
 6 LING 200³, LING 222³
 18 Credits in Linguistics

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PROGRAM COURSES:

Classics

CLAS 211 Greek Literature (3 credits)

An introduction to the literature of ancient Greece, this course focuses on Homer and the epic cycle, the Homeric hymns, Hesiod and lyric poetry, tragedy and comedy. The texts are read in English translation.

CLAS 212 Roman Literature (3 credits)

An introduction to the major authors of the Roman world, this course focuses on Catullus, Virgil, Horace, Ovid and Lucretius; works of the dramatists, orators and satirists may also be included. The texts are read in English translation.

CLAS 221 Life and Times in Ancient Greece (3 credits)

This course explores the lifestyles, customs, and daily practices of the people of Ancient Greece through archaeological, historical, and literary sources.

NOTE: Students who have received credit for this topic under a CLAS 298 number may not take this course for credit.

CLAS 222 Life and Times in Ancient Rome (3 credits)

This course explores the lifestyles, customs, and daily practices of the people of Ancient Rome through archaeological, historical, and literary sources.

NOTE: Students who have received credit for this topic under a CLAS 298 number may not take this course for credit.

CLAS 230 (also listed as HIST 219) Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century BC.

NOTE: Students who have received credit for HIST 219 may not take this course for credit.

CLAS 240 (also listed as HIST 223) Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic, and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century BC, with special emphasis placed upon Athens.

NOTE: Students who have received credit for HIST 223 may not take this course for credit.

CLAS 242 (also listed as HIST 225) History of the Roman Republic (3 credits)

This course offers a political, social, economic, and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for HIST 225 may not take this course for credit.

CLAS 261 Greek Mythology (3 credits)

A survey of the myths of ancient Greece and their characters — deities, heroes, mortals and monsters, this course examines the significance of the myths within their own time and their relevance for the modern world. Both literary and visual sources are used.

CLAS 262 Mythology of the Ancient Mediterranean (3 credits)

An examination of the common mythological themes of the ancient Mediterranean, this course focuses on the events, the characters, and the significance of recurrent elements as found in the myths of Mesopotamia, Egypt, Greece, and Rome.

CLAS 263 Archaeology of Archaic Greece (3 credits)

This course explores the cultural developments of the period (circa 650 to 450 BCE) through its material remains.

NOTE: Students who have received credit for this topic under a CLAS 298 number may not take this course for credit.

CLAS 266 An Introduction to Classical Archaeology (3 credits)

This course provides a general overview of the material remains of ancient Greece from the Bronze Age to the Hellenistic period. It addresses the function, context, dating, and meaning of artifacts, as well as methods of analysis.

NOTE: Students who have received credit for CLAS 266 may not take this course for credit.

CLAS 267 *The Archaeology of the Greek Bronze Age* (3 credits)

The Bronze Age in Mainland Greece, Crete, and the Greek Islands.

CLAS 280 *Introductory Ancient Greek* (6 credits)

The fundamentals of Greek grammar are presented in a course designed to enable the student to read the ancient authors as soon as possible.

CLAS 290 *Introductory Latin* (6 credits)

The fundamentals of Latin grammar are presented in a course designed to enable the student to read the principal Roman authors as soon as possible.

CLAS 298 *Selected Topics in Classics* (3 credits)

CLAS 299 *Selected Topics in Classics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 320 *The Heroic Epics of Greece and Rome* (3 credits)

Homer's *Iliad* and *Odyssey* and Virgil's *Aeneid* are considered in depth, with some attention given to other examples of epic, such as the *Argonautica* of Apollonius of Rhodes and Lucan's *Pharsalia*. Topics include epic as a genre, the nature of oral poetry, ethical values presented and the epic tradition and innovation. The texts are read in English translation.

CLAS 330 *Greek Drama* (3 credits)

Designed as an introduction to Greek drama from the origins of tragedy in the sixth century to New Comedy, this course consists of a detailed study of selected plays of Aeschylus, Sophocles, Euripides, Aristophanes and Menander. Also considered are Aristotle's *Poetics* and production techniques of the Greek theatre. The texts are read in English translation.

CLAS 341 *(also listed as HIST 323)*

***Greek History from Alexander to the Roman Conquest* (3 credits)**

A political, social, economic, and cultural history of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 BCE.

NOTE: Students who have received credit for CLAS 241 or HIST 224 or HIST 323 may not take this course for credit.

CLAS 343 *(also listed as HIST 327)*

***History of the Roman Empire* (3 credits)**

This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to the end of the Roman Empire in the West.

NOTE: Students who have received credit for CLAS 243 or HIST 226 or HIST 327 may not take this course for credit.

CLAS 353 *Representations of Women in Ancient Greece and Rome* (3 credits)

The ancient Greek and Roman representations of women are examined within their historical and cultural contexts. Focus is placed on the changing social roles, status and images of women in antiquity. Both visual and literary sources are used.

CLAS 364 *Classical Greek Art and Archaeology* (3 credits)

An exploration of the monuments and artifacts of Classical Greece, ca. 680 to 380 BC, this course concentrates on architecture, sculpture, vase painting, artistic production and methods of interpretation.

CLAS 365 *Art and Archaeology of the Hellenistic Age* (3 credits)

An investigation of the art and archaeology of the Hellenistic age from the death of Alexander in 323 to the mid-first century BC, this course examines architecture, sculpture, mosaics, wall painting and the minor arts; emphasis is on the Roman influence on Greek art of the period.

CLAS 369 *Roman Art and Archaeology* (3 credits)

An introduction to the artifacts and monuments of Roman civilization from the sixth century BC through the Empire (third century AD), this course examines artistic styles, techniques, function, iconography and interpretation.

CLAS 370 *Practicum in Archaeology* (3 credits)

Prerequisite: Permission of the Department. This course is designed to give the student on-site fieldwork experience in either survey or excavation work. At least one month in the field is required.

CLAS 383 *Intermediate Ancient Greek I* (3 credits)

Prerequisite: CLAS 280 or equivalent. This course provides a review of Ancient Greek grammar and syntax and deals with additional features not covered in the introductory course. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for CLAS 381 or 382, or for this topic under a CLAS 398 number, may not take this course for credit.

CLAS 384 *Intermediate Ancient Greek II* (3 credits)

Prerequisite: CLAS 383 or equivalent. This course completes the review of grammar and provides additional details not covered in Intermediate Ancient Greek I. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for CLAS 381 or 382, or for this topic under a CLAS 398 number, may not take this course for credit.

CLAS 391 *Reading Latin Prose* (3 credits)

Prerequisite: CLAS 290 or equivalent. Prose works of authors such as Caesar, Cornelius Nepos, Cicero and Pliny are read in the original Latin text. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 392 *Reading Latin Poetry* (3 credits)

Prerequisite: CLAS 290 or equivalent. Selected works of the Roman poets are read in the original Latin text, with emphasis on Catullus, Ovid, Martial and Petronius. Attention is given to further study of grammatical and syntactical structures of the language.

NOTE: Students who have received credit for CLAS 390 may not take this course for credit.

CLAS 398 *Selected Topics in Classics* (3 credits)**CLAS 399 *Selected Topics in Classics* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CLAS 410 *Studies in Greek Literature: Prose* (3 credits)

Prerequisite: CLAS 383 or equivalent; CLAS 384 or equivalent previously or concurrently. Works of the Greek historians, philosophers and orators are studied in depth. While authors read vary from year to year, the primary focus is on Herodotus, Thucydides, Plato or Demosthenes.

CLAS 411 *Studies in Greek Literature: Poetry* (3 credits)

Prerequisite: CLAS 383 or equivalent; CLAS 384 or equivalent previously or concurrently. Works of Greek epic, lyric or dramatic poetry are studied in depth. While authors read vary from year to year, the primary focus is on Homer, Aeschylus, Sophocles, Euripides or Pindar.

CLAS 420 *Advanced Latin Prose* (3 credits)

Prerequisite: CLAS 391 and 392, or equivalent. Works of the Roman historians, philosophers and orators are studied in depth. While authors read vary from year to year, the primary focus is on Cicero, Sallust, Livy or Tacitus.

CLAS 421 *Advanced Latin Poetry* (3 credits)

Prerequisite: CLAS 391 and 392, or equivalent. Works of the Roman poets are studied in depth. While authors read vary from year to year, the primary focus is on Virgil, Ovid, Horace, Juvenal or Lucretius.

CLAS 450 *Honours Seminar* (3 credits)

Prerequisite: Permission of the Department. The seminars focus on oral presentations by students. Topics vary from year to year.

CLAS 451 *Honours Thesis* (3 credits)

Prerequisite: Permission of the Department. The student works with an individual faculty member in a particular area of archaeology, history or philology to produce an extensive research paper.

CLAS 480 *Tutorial* (3 credits)

Prerequisite: Permission of the Department. This course provides students with the opportunity to study a topic of individual interest under the guidance of a faculty member.

CLAS 498 *Advanced Topics in Classics* (3 credits)**CLAS 499 *Advanced Topics in Classics* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Arabic (Modern Standard)

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

MARA 205 *Introduction to Modern Standard Arabic I* (6 credits)

This course provides an intensive introduction to the basic elements of Modern Standard Arabic for the student with no knowledge of the language. Instruction addresses all the language competencies of Modern Standard Arabic.

MARA 206 Introduction to Modern Standard Arabic II (6 credits)

Prerequisite: MARA 205. This course continues the introduction to the basic elements of Modern Standard Arabic. Students practise conversation skills on basic general topics.

MARA 240 Intermediate Modern Standard Arabic (6 credits)

Prerequisite: MARA 206. This course provides a review of the basic elements of Modern Standard Arabic and continues to develop the four language skills within their cultural context. Students prepare brief essays and oral presentations.

MARA 301 Advanced Arabic through Media (3 credits)

Prerequisite: MARA 240 or equivalent. This course focuses on advanced Modern Standard Arabic through the analysis of media, including video, audio, and written press. Instruction builds particularly on the student's ability to respond to the works studied with advanced writing and oral strategies.

MARA 308 Arabic for Business (3 credits)

Prerequisite: MARA 240 or equivalent. This course is designed to give intermediate and advanced students a solid foundation in business vocabulary, correspondence, and basic business practices, as well as the cultural concepts necessary to enable them to express themselves in the Arabic-speaking business world.

NOTE: Students who have received credit for this topic under a MARA 398 number may not take this course for credit.

MARA 310 Introduction to the Literature of the Arab World (3 credits)

This course provides an introduction to the works of some of the major writers of contemporary Arabic culture. The course is taught in English and readings are in English translation.

MARA 365 The Culture and Civilization of the Arab World (3 credits)

This course provides an overview of the cultural manifestations of the Arab world. Topics include art, literature, culture, history, and philosophy. This course is taught in English.

MARA 398 Special Topics in Arabic Language and Culture (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MARA 480 Tutorial (3 credits)

Prerequisite: Permission of the Department. This course provides students with the opportunity to study a topic of individual interest under the guidance of a faculty member.

Chinese (Mandarin)

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

MCHI 205 Introduction to Modern Chinese (Mandarin) I (9 credits)

This course provides an intensive introduction to the basic elements of Mandarin Chinese for the student with no knowledge of the language. Emphasis is on basic grammatical concepts, listening comprehension, and sound reproduction. Approximately 300 characters are studied.

NOTE: Students whose first language is Mandarin Chinese, or who have received a substantial part of their education in Mandarin Chinese, may not register for this course.

NOTE: Lab practice is compulsory in addition to class time: three hours per week for nine-credit sections.

MCHI 206 Introduction to Modern Chinese (Mandarin) II (6 credits)

Prerequisite: MCHI 205. This course continues the introduction to the basic elements of Mandarin Chinese, adding approximately 300 further characters.

NOTE: Students whose first language is Mandarin Chinese, or who have received a substantial part of their education in Mandarin Chinese, may not register for this course.

NOTE: Lab practice is compulsory in addition to class time: two hours per week for six-credit sections.

MCHI 240 Intermediate Modern Chinese (Mandarin) (6 credits)

Prerequisite: MCHI 206. The aim of this course is to consolidate the knowledge acquired in MCHI 205 and 206 and pursue communication skills on basic general topics in all competencies of the language, adding approximately 300 further characters.

MCHI 250 Intermediate Modern Chinese II (3 credits)

Prerequisite: MCHI 240 or equivalent. This course is a continuation of MCHI 240. It prepares intermediate language students in diverse aspects of reading, writing, and conversation. In addition to improving listening comprehension and speaking skills, this course places increased emphasis on reading and writing.

NOTE: Students who have received credit for this topic under an MCHI 398 number may not take this course for credit.

MCHI 306 Introduction to Translation (3 credits)

Prerequisite: MCHI 250 previously or concurrently. The emphasis of this course is placed on advanced grammar for the purposes of writing and translation.

NOTE: Students who have received credit for this topic under an MCHI 398 number may not take this course for credit.

MCHI 308 Chinese for Business (3 credits)

Prerequisite: MCHI 250 previously or concurrently. This course provides students with marketable skills including linguistic competence, cross-cultural proficiency, and knowledge about business in China across a variety of fields.

MCHI 310 Introduction to Modern Chinese Literature (3 credits)

This course provides an introduction to the works of some of the major writers of contemporary Chinese culture. The course is taught in English and reading materials are in English translation.

MCHI 311 Classical Chinese Literature (3 credits)

Taught in English, this course introduces classical Chinese literature from 1500 BCE to the end of the 19th century in its historical and cultural setting. Covering the four major literary genres of poetry, prose, drama and fiction, students learn both key Chinese aesthetic concepts and Western critical theory, with a view to encouraging cross- and intercultural interpretations. Major works are read in English translation.

NOTE: Students who have received credit for this topic under an MCHI 398 number may not take this course for credit.

MCHI 365 Introduction to Chinese Cultural Traditions (3 credits)

This course is an introduction to the formation and traditions of Chinese culture. Topics may include Confucian and Taoist philosophy, literature, and the arts. This course is taught in English.

NOTE: Students who have received credit for this topic under an MCHI 398 number may not take this course for credit.

MCHI 366 Chinese Visual Culture (3 credits)

Taught in English, this course introduces students to the traditions and achievements of Chinese visual culture. Employing contemporary critical approaches, students explore both mass and high cultures, with a primary focus on the development of Chinese painting from the 10th century to the present, with an emphasis on the interpretation of images.

NOTE: Students who have received credit for this topic under an MCHI 398 number may not take this course for credit.

MCHI 398 Special Topics in Chinese Language and Culture (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MCHI 399 Special Topics in Chinese Language and Culture (6 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MCHI 480 Tutorial (3 credits)

Prerequisite: Permission of the Department. This course provides students with the opportunity to study a topic of individual interest under the guidance of a faculty member.

German

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

GERM 200 Introductory German: Intensive Course (6 credits)

This course provides a comprehensive introduction to most of the basic elements of the German language for the student with no knowledge of German. Practice is provided through short readings, conversation, composition, and lab work.

NOTE: Students who have received credit for GERM 201, 202, or equivalent may not take this course for credit.

NOTE: This course covers the same material as GERM 201 and 202.

GERM 201 Introductory German I (3 credits)

This course provides an introduction to the elements of the German language for the student with no knowledge of German.

Practice is provided through short readings, conversation, composition, and lab work.

NOTE: Students who have received credit for GERM 200 or equivalent may not take this course for credit.

GERM 202 Introductory German II (3 credits)

Prerequisite: GERM 201 or equivalent. This course is a continuation of GERM 201 and completes the study of the basic elements of the German language. Practice is provided through short readings, conversation, composition, and lab work.

NOTE: Students who have received credit for GERM 200 or equivalent may not take this course for credit.

GERM 230 Introduction to German Culture (3 credits)

This course offers a panoramic study of the major components of the culture of German-speaking countries from the Middle Ages to contemporary times. Attention is given to these countries' artistic, social, political, and economic life. This course is taught in English.

GERM 231 German Literature in Translation (3 credits)

This course focuses on reading and discussion of 20th-century literary works and films from Germany, Austria, and Switzerland. Works translated from German are used. This course is taught in English, but advanced German students are encouraged to read the texts in German.

GERM 240 Intermediate German: Intensive Course (6 credits)

Prerequisite: GERM 200, 202, or equivalent. This course provides a review of German grammar in a single term and furnishes additional details not dealt with in the introductory courses. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for GERM 241, 242, or equivalent may not take this course for credit.

NOTE: This course covers the same material as GERM 241 and 242.

GERM 241 Intermediate German I (3 credits)

Prerequisite: GERM 200, 202, or equivalent. This course provides a review of German grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for GERM 240 or equivalent may not take this course for credit.

GERM 242 Intermediate German II (3 credits)

Prerequisite: GERM 241 or equivalent. This course is a continuation of GERM 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for GERM 240 or equivalent may not take this course for credit.

GERM 260 German for Reading Knowledge (3 credits)

This course introduces the student to reading strategies, grammar, resources, and basic vocabulary and leads to a second-year reading knowledge of German in 13 weeks. This course is taught in English.

NOTE: Students registered in the German Minor program may not take this course for credit.

GERM 270 Conversational German I (3 credits)

Prerequisite: GERM 241 or equivalent or permission of the Department. This course develops oral communication skills and is applicable to real-life situations such as those in business, the arts, society, and education.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 298 AND HIGHER WILL BE CONDUCTED IN GERMAN.

GERM 298 Selected Topics in German (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 301 Advanced Grammar and Composition I (3 credits)

Prerequisite: GERM 240 or 242 or permission of the Department. This course is designed to help students understand advanced aspects of German grammar and to provide practice in the correct and effective writing of German.

GERM 302 Advanced Grammar and Composition II (3 credits)

Prerequisite: GERM 301. This course continues the study of advanced aspects of German grammar and provides practice in the correct and effective writing of German by means of composition such as the summary, description, narration, argumentation, and essay.

GERM 306 Introduction to Translation (3 credits)

Prerequisite: GERM 240 or 242. This course examines German and English grammar in a comparative context in order to provide a basis for translation between the two languages. It also aims to develop lexical and semantic knowledge of the German language through analysis of textual materials, with special focus on words and idiomatic expressions that are essential to clear and effective communication. Students translate short texts from a variety of fields, primarily from English to German.

GERM 307 Translation Practice (3 credits)

Prerequisite: GERM 306. This course continues the examination of German and English grammar in a practical context as a basis for translation between the two languages. It also enhances student lexical and semantic knowledge of the German language through direct, practical experience in translation. Students improve their vocabulary and linguistic accuracy by exploring the range of meanings associated with particular structures and idiomatic expressions. Translation is primarily from English to German.

GERM 308 German for Business (3 credits)

Prerequisite: GERM 240 or 242 or equivalent. This course provides students with marketable skills including linguistic competence, cross-cultural proficiency, and knowledge about business in Germany across a variety of fields.

NOTE: Students who have received credit for this topic under a GERM 398 number may not take this course for credit.

GERM 310 Introduction to Modern German Literature I (3 credits)

Prerequisite: GERM 301. This course provides a general overview of the major authors and trends of German literature from 1750 to 1900 within an historical context.

GERM 311 Introduction to Modern German Literature II (3 credits)

Prerequisite: GERM 301. This course provides a general overview of the major authors and trends of German literature in the 20th century within an historical context.

GERM 361 Topics in the Culture of German-Speaking Nations (3 credits)

Prerequisite: GERM 240 or 242. Topics vary from year to year. Possible topics include German film; literature of the Counter-culture; Germany and the Holocaust; immigrant culture and its discourse; women's writing; popular culture; Medieval Germany: kings, castles, and minstrels; cultural diversity in German-speaking nations. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students may take this course twice for credit in their program provided the subject matter is different.

GERM 362 Modern Germany (3 credits)

Prerequisite: GERM 240 or 242. This course gives an overview of the developments in Germany throughout the 20th century. The emphasis of the course may vary from year to year with such topics as Germany between World War I and II, the formative years after WWII and the development of East and West Germany, and the unified Germany. Materials to be studied include historical and topical documents, film, video, and web-based resources.

GERM 370 Conversational German II (3 credits)

Prerequisite: GERM 270. This course emphasizes the discussion and analysis of short and non-fictional and journalistic German texts to structure oral practice and to develop reading skills.

GERM 398 Selected Topics in German (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GERM 410 Dramatic Representations in German Cultures (3 credits)

Prerequisite: GERM 310 or 311. The subject matter of this course varies. Topics may include classical German theatre, the theatre of Bertolt Brecht, and developments in contemporary theatre.

NOTE: Students who have received credit for GERM 432 or 436 may not take this course for credit.

GERM 420 Narrative Representation in German Literature (3 credits)

Prerequisite: GERM 310 or 311. The subject matter of this course varies. Topics may include post-reunification German prose, German Bildungsroman, representations of the Holocaust in German prose, migrant literature in Germany, and literature of the divided Germany.

GERM 480 Tutorial I (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 481 Tutorial II (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 482 Tutorial III (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 483 Tutorial IV (3 credits)

Prerequisite: Permission of the Department. This course offers guided readings in German language and/or literature, to meet the student's individual needs. At least one major written assignment is required.

GERM 490 Honours Essay Tutorial (3 credits)

Prerequisite: Honours status. This course provides the honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the German section.

GERM 498 Advanced Topics in German (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Italian

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

ITAL 200 Introductory Italian: Intensive Course (6 credits)

This course provides a comprehensive introduction to the Italian language, completing the fundamental aspects of grammar in one term.

NOTE: Students who have received credit for ITAL 201 or 202 or 210 or 211 or 253 or 254 may not take this course for credit.

NOTE: This course covers the same material as ITAL 201 and 202.

ITAL 201 *Introductory Italian I* (3 credits)

This course provides an introduction to the basic elements of Italian for the student with no knowledge of the language.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 253 or 254 may not take this course for credit.

ITAL 202 *Introductory Italian II* (3 credits)

Prerequisite: ITAL 201 or equivalent. The objective is to complete the study of fundamental aspects of Italian grammar.

NOTE: Students who have received credit for ITAL 200 or 210 or 211 or 253 or 254 may not take this course for credit.

ITAL 210 *Italian for Heritage Speakers I* (3 credits)

Prerequisite: Permission of the Department. This course provides an introduction to the basic elements of the Italian language and is designed for heritage speakers of Italian and/or students with some previous passive knowledge or exposure to the language, who wish to strengthen their linguistic knowledge of and skills in Italian. Emphasis is placed on grammar, reading and writing, vocabulary development, and exposure to the language and culture of Italian communities. Both oral and written expression are emphasized.

NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 253 or 254, or for this topic under an ITAL 298 number, may not take this course for credit.

ITAL 211 *Italian for Heritage Speakers II* (3 credits)

Prerequisite: ITAL 210 or permission of the Department. This course is a continuation of ITAL 210 designed for heritage speakers of Italian and/or students with some previous passive knowledge or exposure to the language, who wish to strengthen their linguistic knowledge of and skills in Italian. Emphasis is placed on grammar, reading and writing, vocabulary development, and exposure to the language and culture of Italian communities. Both oral and written expression are emphasized.

NOTE: Students who have received credit for ITAL 200 or 201 or 202 or 253 or 254, or for this topic under an ITAL 298 number, may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 240 AND HIGHER WILL BE CONDUCTED IN ITALIAN.

ITAL 240 *Intermediate Italian: Intensive Course* (6 credits)

Prerequisite: ITAL 200 or 202 or 211 or equivalent. This course provides a review of Italian grammar in one term and deals with additional details not covered in the introductory course. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for ITAL 241 or 242 or 253 or 254 may not take this course for credit.

NOTE: This course covers the same material as ITAL 241 and 242.

ITAL 241 *Intermediate Italian I* (3 credits)

Prerequisite: ITAL 200 or 202 or 211 or equivalent. This course provides a review of Italian grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for ITAL 240 or 253 or 254 may not take this course for credit.

ITAL 242 *Intermediate Italian II* (3 credits)

Prerequisite: ITAL 241 or equivalent. This course is a continuation of ITAL 241. It completes the review of the grammar and provides additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for ITAL 240 or 253 or 254 may not take this course for credit.

ITAL 256 *Translation I* (3 credits)

Prerequisite: ITAL 200 or 202 or 211 or 254. This course provides a review of Italian grammar and introduces students to the fundamentals of translation.

ITAL 257 *Translation II* (3 credits)

Prerequisite: ITAL 256 or equivalent. This course continues the review of Italian grammar begun in ITAL 256 and uses selected short texts for translation into Italian.

ITAL 298 *Selected Topics in Italian* (3 credits)

ITAL 299 *Selected Topics in Italian* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 301 *Advanced Grammar and Composition I* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course is intended to give the student increased fluency in and a firmer command of the language.

ITAL 302 *Advanced Grammar and Composition II* (3 credits)

Prerequisite: ITAL 301 or equivalent. This course is a continuation of ITAL 301. It provides students with further practice in advanced grammar and composition.

ITAL 306 *Advanced Translation I* (3 credits)

Prerequisite: ITAL 257 or equivalent. This course deals with idiomatic Italian usage and provides practice by means of translations into Italian of published material on a variety of topics.

ITAL 307 *Advanced Translation II* (3 credits)

Prerequisite: ITAL 306 or equivalent. This course is a continuation of ITAL 306. It deals with advanced problems and techniques of translation from Italian and into Italian.

ITAL 308 *Italian for Business* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course is designed to give intermediate-advanced level students a solid foundation in business vocabulary, correspondence, and basic business practices, as well as the cultural concepts necessary to enable them to express themselves in the Italian-speaking business world.

ITAL 310 *Survey of Italian Literature I* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course examines the major authors and trends of Italian literature from its origins to the end of the 16th century.

ITAL 311 *Survey of Italian Literature II* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course examines the major authors and trends of Italian literature from the beginning of the 17th century to the present.

ITAL 365 *Italian Civilization I* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course provides a survey of Italy's cultural and scientific achievements until the end of the 16th century. Attention is given to Italy's social, political, and economic life.

ITAL 366 *Italian Civilization II* (3 credits)

Prerequisite: ITAL 240 or 242 or 254 or equivalent. This course provides a survey of Italy's cultural and scientific achievements from the beginning of the 17th century to the present day. Attention is given to Italy's social, political, and economic life.

ITAL 398 *Selected Topics in Italian* (3 credits)

ITAL 399 *Selected Topics in Italian* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ITAL 415 *Dante and the Middle Ages* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 310 or 365 previously or concurrently; or permission of the Department. In this course selected passages of the *Vita nuova*, the *Monarchia*, and other earlier works are studied. Dante's contributions to the formation of the Italian language, literature, and culture are considered in their historical, social, and political context.

ITAL 416 *Dante: Divina Commedia* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 310 or 365 previously or concurrently; or permission of the Department. This course undertakes an analysis of selected cantos of the *Divina Commedia* as a synthesis of medieval culture.

ITAL 422 *Petrarch and Boccaccio* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 310 or 365 previously or concurrently; or permission of the Department. This course examines the origin and evolution of the early Italian novella. Petrarch and Boccaccio are studied as forerunners of humanism; emphasis is placed on Petrarch's *Canzoniere* and Boccaccio's *Decameron*.

ITAL 427 *Italian Humanism and the Renaissance* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 310 or 365 previously or concurrently; or permission of the Department. This course deals with the rise of humanism and analyzes the Renaissance as a historical and cultural concept. References are made to the social, historical, and artistic trends in 15th- and early-16th-century Italy. Emphasis is on representative works of Alberti, Valla, Leonardo da Vinci, Pico della Mirandola and Machiavelli.

ITAL 434 *The Epic Tradition in Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 310 or 365 previously or concurrently; or permission of the Department. This course explores the nature and evolution of the chivalresque genre in Italy, mainly within the context of the 15th and 16th centuries, and with special emphasis on Ariosto and Tasso.

ITAL 435 *The Baroque Age in Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course presents a study of the Baroque as a cultural concept, and deals with representative literary, historical, artistic, and scientific works from such figures as Marino, Sarpi, Campanella, Galileo, and Bernini.

ITAL 436 *The Age of Enlightenment in Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course examines the Enlightenment as a cultural concept, and provides a study of representative texts of such authors as Goldoni, Vico, Parini, and Beccaria.

ITAL 439 *Romanticism in Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course examines the concept of Romanticism in Italy and its relation to Risorgimento. Emphasis is on representative works of Foscolo, Manzoni, and Leopardi. References are made to the role of leading political figures of the period.

ITAL 443 *Post-unification Italian Culture: From Verismo to Futurism* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course provides a study of the debate on the nature of Realism and the avant-garde in Italy in the late-19th and early-20th centuries. Readings are taken from such authors as Verga, Carducci, D'Annunzio and Marinetti.

ITAL 445 *Literature and Culture in Fascist Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course explores the literary trends in Italy between the first and second World Wars within a historical and political context. It provides a study of representative works of such figures as Svevo, Pirandello, and Montale. Leading critical thinkers such as Croce and Gramsci are taken into consideration.

ITAL 446 *Cultural Expressions in Italy from Neo-Realism to the Present* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course examines the debate on Neo-realism and looks at literary and cinematographic expressions. It also deals with the *Neo-avanguardia* movement and questions of gender and post-modernism. Emphasis is on Calvino, Sciascia, Fellini, Antonioni, and Eco. References are also made to the social and political reality of contemporary Italy.

ITAL 450 *Feminist Discourse in Italy* (3 credits)

Prerequisite: ITAL 301 or equivalent; ITAL 311 or 366 previously or concurrently; or permission of the Department. This course studies the question of gender as a concept and traces its presence within the Italian cultural tradition from the Renaissance to the present. Representative works of figures such as Franco, Marinelli, de Fonseca Pimentel, Deledda, Aleramo, and Maraini are studied.

ITAL 461 *History of the Italian Language I* (3 credits)

Prerequisite: ITAL 301 or equivalent. This course examines the history of the Italian language from its origins to the end of the 16th century through the study of representative texts. Attention is given to other Romance languages.

ITAL 462 *History of the Italian Language II* (3 credits)

Prerequisite: ITAL 301 or equivalent. This course examines the history of the Italian language from the beginning of the 17th century to the present day through the study of representative texts. Attention is given to other Romance languages.

ITAL 480 *Tutorial I* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 481 *Tutorial II* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 482 *Tutorial III* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 483 *Tutorial IV* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Italian language and/or literature, and is designed to meet the individual needs of advanced students. Assignments include written and oral criticism of the works studied.

ITAL 490 *Honours Essay Tutorial* (3 credits)

Prerequisite: Honours status. This course provides the honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the Italian section.

ITAL 498 *Advanced Topics in Italian* (3 credits)

ITAL 499 *Advanced Topics in Italian* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Spanish

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

SPAN 200 *Introductory Spanish: Intensive Course* (6 credits)

This course provides a comprehensive introduction to the Spanish language, completing the fundamental aspects of grammar in one term.

NOTE: Students who have received credit for SPAN 201 or 202 may not take this course for credit.

NOTE: This course covers the same material as SPAN 201 and 202.

SPAN 201 *Introductory Spanish I* (3 credits)

This course provides an introduction to the basic elements of Spanish for the student with no knowledge of the language.

NOTE: Students who have received credit for SPAN 200 may not take this course for credit.

SPAN 202 *Introductory Spanish II* (3 credits)

Prerequisite: SPAN 201 or equivalent. The objective of this course is to complete the study of fundamental aspects of Spanish grammar.

NOTE: Students who have received credit for SPAN 200 may not take this course for credit.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 240 AND HIGHER WILL BE CONDUCTED IN SPANISH.

SPAN 240 *Intermediate Spanish: Intensive Course* (6 credits)

Prerequisite: SPAN 200 or 202 or equivalent. This course provides a review of Spanish grammar in a single term and furnishes additional details not dealt with in the introductory courses. Practice is provided through readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 241 or 242 may not take this course for credit.

NOTE: This course covers the same material as SPAN 241 and 242.

SPAN 241 *Intermediate Spanish I* (3 credits)

Prerequisite: SPAN 200 or 202 or equivalent. This course provides a review of Spanish grammar and deals with additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 240 may not take this course for credit.

SPAN 242 *Intermediate Spanish II* (3 credits)

Prerequisite: SPAN 241 or equivalent. This course is a continuation of SPAN 241. It completes the review of the grammar and includes additional details not covered in the introductory courses. Practice is provided through short readings, discussions, and composition.

NOTE: Students who have received credit for SPAN 240 may not take this course for credit.

SPAN 298 *Special Topics in Spanish* (3 credits)

SPAN 299 *Special Topics in Spanish* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SPAN 301 *Grammar and the Process of Writing I* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course offers a practical analysis of the conventions that govern grammar, spelling, punctuation, and syntax in Peninsular and Latin-American Spanish. It also focuses on the means of identifying, analyzing, and using effective stylistic resources in different forms of writing such as summaries, notes, journals, and short stories.

SPAN 302 *Grammar and the Process of Writing II* (3 credits)

Prerequisite: SPAN 301 or equivalent. This course continues the practical analysis of grammar and focuses on using effective stylistic resources and formal conventions in writing, especially for essays and related texts.

SPAN 303 *Critical Reading of Hispanic Texts* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course offers a survey of the major rhetorical devices and methodological tools for the critical reading of literary and other texts, and for the production of well-founded and persuasive writing in Spanish. The course covers notions of narratology and poetics, as well as discourse analysis and critical thinking. Activities include close reading of Hispanic texts and practical work in research and documentation, as well as the presentation of well-organized, analytical prose.

SPAN 305 *Communicative Strategies and Oral Communication for Non-Native Speakers* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course is offered to *non-native* speakers of Spanish only. Its main goal is for students to improve their oral production in Spanish. This course also encourages improved levels of competence in the other language skills: listening, reading, and to some extent writing.

NOTE: Students who have received credit for this topic under a SPAN 398 number may not take this course for credit.

SPAN 306 *Introduction to Translation* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course examines Spanish and English grammar in a comparative context in order to provide a sound basis for translation between the two languages. It also aims to develop lexical and semantic knowledge of the Spanish language through analysis of textual materials. Students translate short texts from a variety of fields such as literature, business, journalism, politics, and science. Translation is primarily from English to Spanish (some reference to French is included).

SPAN 307 *Translation Practice* (3 credits)

Prerequisite: SPAN 306 or equivalent. This course continues the examination of Spanish and English grammar in a practical context as a basis for translation between the two languages. It also enhances the students' lexical and semantic knowledge of the Spanish language through direct, practical experience in translation. Students translate texts from a variety of fields, with a particular emphasis on business, finance, tourism, journalism, and the arts. Translation is primarily from English to Spanish (some reference to French is included).

SPAN 308 *Spanish for Business* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course is designed to give students a solid foundation in business vocabulary and basic business practices, as well as the cultural concepts necessary to enable them to function in the Spanish-speaking business world. Activities may include the elaboration of different types of business documents, oral group activities and simulations, and the development of strategies needed for comprehension through visual and/or aural material.

SPAN 310 *Conquest and Empire: Spanish Literature from the 12th to the 17th Centuries* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to medieval and early modern Spanish literature by examining the relationship between cultural manifestations and emergent narratives of Spanish national history. Students are also introduced to literary analysis and its relation to socio-cultural issues through activities that may include small group discussions, close readings, short analytical papers, and essay exams.

SPAN 311 *Crisis and Introspection: Spanish Literature from the 18th to the 21st Centuries* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to modern Spanish literature and examines the relationship between these cultural manifestations and Spain's difficult transition towards modernity, with special emphasis on the Generation of '98 and its role in the debates that culminated in the Spanish Civil War. Students are also introduced to literary analysis and its relation to socio-cultural issues through activities that may include small group discussions, close readings, short analytical papers, and essay exams.

SPAN 320 *Defining Difference in Spanish America: Literature from 1500 to 1880* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to the richly varied texts of colonial Spanish America and the early independence era. It examines how from its very beginnings Spanish-American discourse attempts to distinguish itself from Peninsular traditions throughout the various cultural eras and within its socio-political contexts. Readings include letters, chronicles, poetry, and essays. Activities may include critical reading, oral discussions and presentations, summaries, and brief essays.

SPAN 321 *Identity and Independence in Spanish America: Literature from 1880 to the Present* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to the literature of the period following independence. It examines how the literature defines Spanish-American identities in urban and rural perspectives, in different genres and genders, throughout the cultural eras of the period, and within its socio-political contexts. Readings include poetry, essays, short stories, and excerpts from novels. Activities may include critical reading, oral discussions and presentations, summaries, and brief essays.

SPAN 362 *Cultures of Mexico, the Central American Region, and the Spanish Caribbean* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to the cultural manifestations of the nations of these regions within an historical framework. Emphasis is on the interaction between the events that shape the area, the wide variety of cultures that arose there, and the forms of artistic endeavour through which the peoples express themselves. Mexico, Cuba, and Colombia are given special importance; the history and culture of the Dominican Republic, Venezuela, Puerto Rico, and the Central American countries are also highlighted. Activities may include oral discussions and presentations, analysis of written and visual texts, use of relevant Internet resources, summaries, and brief essays.

SPAN 363 *Cultures of the Southern Cone and the Andean Region* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course introduces students to the cultural achievements of the nations of the region within an historical framework. Emphasis is on the interaction between the events that shape the area, the wide variety of cultures that arose there, and the forms of artistic endeavour through which the many different peoples express themselves. Argentina, Peru, and Chile are given special importance; the history and culture of Uruguay, Ecuador, and Bolivia are also highlighted. Activities may include oral discussions and presentations, analysis of written and visual texts, use of relevant Internet resources, summaries, and brief essays.

SPAN 365 *The History of Spanish Culture* (3 credits)

Prerequisite: SPAN 240 or 242 or equivalent. This course examines important linguistic, literary, and artistic developments of Spanish culture as they relate to the invention, consolidation, and critique of a unique Spanish identity. Activities may include oral discussions and presentations, analysis of written and visual texts, use of relevant Internet resources, summaries, and brief essays.

SPAN 398 *Special Topics in Spanish* (3 credits)

SPAN 399 *Special Topics in Spanish* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

GROUP A COURSES: *Literature and Society*

(SPAN 406-422 refer to Spain, 441-445 to Spanish America)

Literature and Society explores the way in which the literary discourses of Spain and Spanish America both reflect and shape society in a historical context. It is based mainly on the chronological study of genres in literature. This option is the base for the honours program.

SPAN 406 *From Orality to Literacy in Medieval Spain, 1100-1500* (3 credits)

Prerequisite: SPAN 301, 303, 310, or equivalent. This course examines the ways in which oral-popular discourses are appropriated by the representatives of "official" culture, as well as how emerging institutions fashion their message around a nascent concern with Hispanic identity in works from the late period of Spain's era of Reconquest. Topics of inquiry may include the social and political function of oral poetry, the importance of ritualistic cultural phenomena, the growing importance of vernacular literature, and the processes of canon formation.

SPAN 411 *Freedom and Containment in Spanish Golden Age Prose, 1550-1700* (3 credits)

Prerequisite: SPAN 301, 303, 310, or equivalent. This course considers a selection of narrative texts from the Spanish Golden Age in order to examine the relationship between the reading subject and an emergent official culture. Through close textual analysis and critical discussion of representative works by authors such as Cervantes, Quevedo, and Zayas, students study and discuss literary and extra-literary issues representative of this period. Course topics may include theories of reader reception, the role of censorship, the construction of gender, and the creation of social types and anti-types.

SPAN 412 *Golden Age Drama and Poetry: Theatricality in Renaissance and Baroque Spain, 1500-1690* (3 credits)

Prerequisite: SPAN 301, 303, 310, or equivalent. This course carries out a comparative study of the rhetorical strategies of literary and extra-literary representation in Golden Age Spain, and their role in the creation of an early modern subject of mass visual culture. Through close textual analysis and critical discussions of representative works by Spanish poets and playwrights such as Garcilaso, Lope, Góngora, Quevedo, Tirso, and Calderón, students examine a number of literary and theoretical topics. These may include the performative aspects of poetry, the literary uses of pictorial perspective, and the relationship between subjectivity and theatricality.

SPAN 415 *Towards Modernity and Liberalism in Spain, 1808-1898* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines the debates that arose during Spain's problematic transition towards cultural, political, and economic liberalism in the 19th century, from the outbreak of the Independence War against France until the fall of the Empire in the Americas. Content may vary from year to year and may include authors such as Zorrilla, Bécquer, Galdós, and Clarín. Topics may include competing visions of rationalism and Romanticism, the interplay of literary, scientific, and economic discourses, photography and new ways of seeing reality, and the relationship between the rise of the bourgeoisie and the reconceptualization of private space.

NOTE: Students who have received credit for SPAN 416 or 417 may not take this course for credit.

SPAN 418 *Cultural Conflicts and Modernity in Spain, 1898-1939* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines the cultural and ideological conflicts that took place in Spain between the fall of the Spanish Empire and the Civil War. Through close readings and critical discussions of works by authors such as Unamuno, Ortega, García Lorca, and Buñuel, students consider topics that may include the ethics of violence in cultural conflict, the relationship between culture and ideology, the role of emotions in the shaping of national identity, and the tension between humanism and technical progress.

NOTE: Students who have received credit for SPAN 419 may not take this course for credit.

SPAN 420 *Dictatorship and Exile in Modern Spain, 1939-1975* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines literary and cultural discourses in Spain during Franco's dictatorship. Content may vary from year to year and may focus on the literature produced under the dictatorship or in exile. Through close readings and critical discussions of works by authors such as Bergamín, Erice, Aub, and Matute, students consider topics that may include the impact of censorship on cultural history, cultural hegemony and exile, reactionary ideologies of modernity, and the role of silence and fragmentary discourse against official constructions of the nation.

NOTE: Students who have received credit for SPAN 419 may not take this course for credit.

SPAN 422 *Spain in Transition: 1960 to the Present* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines Spanish literature in the context of the country's evolution towards cultural post-modernity, since the final years of Franco's dictatorship until today. Through close readings and critical discussions of works by authors such as Brossa, Goytisolo, Almodóvar, and the *Novísimos* group, students consider topics that may include the intertwining of official history and personal memory, the emergence of pop culture, the destabilization of modern identities, and nationalism at the turn of the century.

SPAN 441 *Romanticism and the Construction of Identity in Spanish America, 1820-1890* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines Spanish-American literature and culture of the 19th century in terms of the efforts to define national character through discourses on nature, the peoples, history, and traditions. The relationship of these discourses with Romanticism, the role of the writer, and the image and function of the feminine are particularly examined. Students study representative works by authors such as Heredia, Sarmiento, Gómez de Avellaneda, and Hernández. Students are introduced to the formulation of critical discourse through a series of short essays and oral presentations.

SPAN 442 *Modernism: Modernity and Rebellion, Rupture and Innovation in Spanish-American Letters, 1880-1920* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. Through the study of representative literary and other cultural texts, as well as the critical debates of the era (such as those concerning industrialization, U.S. hegemony and feminism), this course examines the various phases in the development of a Spanish-American consciousness towards modernity and cultural autonomy. Students study representative works by authors such as Martí, Gutiérrez Nájera, Darío, Lugones, and some women authors of the period. Students are introduced to the formulation of critical discourse by writing a series of short essays and delivering oral presentations.

SPAN 443 *The Spanish-American "Boom" and its Predecessors, 1950-1980* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines a selection of Spanish-American novels and essays of the period between approximately 1950 and 1975, known as the *Boom*. Through close textual analysis and a study of critical debates, the course considers literary and extra-literary issues representative of this period, including *lo real maravilloso* and magical realism as Latin-American specificities, the relationship between history and fiction, and the debate between regionalism and cosmopolitanism. Authors studied may include Carpentier, García Márquez, Puig and Allende.

GROUP B COURSES:

***Expression and Culture* (SPAN 450-474)**

Expression and Culture explores and puts into practice the techniques and structures of different modes of expression in Hispanic cultures. It is primarily topics- or thematically based. This option is the base for the specialization program.

SPAN 450 *The Short Narrative in Spain and Spanish America* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. From its beginnings as an independent genre in the 19th century to the most recent minifiction, this course examines the short story in light of different theories of narratology, specifically as relating to the short narrative. Texts are taken from representative authors from either or both Spain and Spanish America, within their cultural context. Students are introduced to the formulation of critical discourse through a series of short essays and an oral presentation; students also write their own short fiction.

SPAN 451 *Dramatic Representations in Hispanic Cultures* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course introduces students to fundamental concepts in the study of Hispanic drama and film, as well as to wider issues of theatricality and performance. It deals with the cultural and historical relation between literature and the visual arts, and presents some basic tools and techniques of research and criticism as related to Hispanic theatre and cinema. The course may include student representations of scenes from plays studied.

SPAN 453 *From Object to Subject: Women and Discourse in Spain and Spanish America* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course introduces texts from different historical periods from various theoretical perspectives. Particular attention is given to theoretical perspectives pertinent to Spain and Spanish America. The function of gender in Hispanic discourse, representation of women, and strategies of expression in women writers are some of the topics that may be examined.

SPAN 455 *Perspectives on the Teaching of Spanish* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent; honours or specialization status with a GPA of 3.00 or higher; permission of the Department. This course provides students with basic knowledge of and structured practice in the principal approaches to the teaching of Spanish to speakers of other languages. Topics may include a selection of approaches to the teaching of Spanish, such as task-based learning, communicative methods, process writing, grammar for teachers of Spanish, the use of computer technology and Internet resources for the teaching of Spanish, the development of didactic material, as well as the incorporation of Hispanic cultural material.

NOTE: Students who have received credit for this topic under a SPAN 498 number may not take this course for credit.

SPAN 461 *The History of the Spanish Language* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines the historical and cultural evolution of the Spanish language. Topics to be considered may include the phonological and morphological development of Vulgar Latin, the development of variants between Peninsular and Spanish-American expression, and the dialogic and conflictive nature of linguistic change. In-class and take-home activities may include the translation of medieval and early modern Spanish texts into their modern equivalents.

SPAN 464 *Current Issues in the Hispanic Cultures: Spanish America* (3 credits)

Prerequisite: SPAN 301; 362 or 363, or equivalent. This course explores current newsworthy events and affairs in the political, social, and cultural spheres of Spanish America as seen through various media sources such as newspapers, magazines, radio and television, and the Internet. It includes a systematic study of techniques of oral expression. As such, activities emphasize oral skills and may include team-based class work and presentations, brief summaries, journal, and oral exams. Format and content vary from year to year.

SPAN 465 *Current Issues in the Hispanic Cultures: Spain* (3 credits)

Prerequisite: SPAN 301, 365, or equivalent. This course explores current newsworthy events and affairs in the political, social, and cultural spheres of Spain as seen through various media sources such as newspapers, magazines, radio and television, and the Internet. It includes a systematic study of techniques of oral expression. As such, activities emphasize oral skills and may include team-based class work and presentations, brief summaries, journal, and oral exams. Format and content vary from year to year.

SPAN 467 *The Avant-Gardes in Spanish America and Spain and their Repercussions in the Arts* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. Starting from an introduction to major currents of the historical Avant-garde (1920-1940), such as Futurism, Cubism, Dadaism, and Surrealism, the course traces the impact of the avant-gardes throughout 20th-century Hispanic poetry and the visual arts. Students explore particular manifestations of these currents in the art and poetry of Spanish America (*Creacionismo* and *Negrismo*) and Spain (*la Generación del '27*). Emphasis is placed on the role of the artist-poet as engaged actor of radical change in all dimensions of social and political life.

SPAN 469 *Hispanic Poetry and Poetics* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines poetic discourse in Hispanic culture. Through close readings and critical discussions of works by Spanish and/or Spanish-American poets, students consider topics that may include the rhetorical and linguistic strategies of poetic discourse, poetry as ideology, poetry and the body, and the relationship between poetry and other written and oral forms of discourse.

SPAN 470 *Spanish-American Testimonio Discourse* (3 credits)

Prerequisite: SPAN 301, 303; 362 or 363; or equivalent. This course offers a comprehensive study of the struggle between subaltern voices and mainstream culture, as manifested in *testimonio* discourse. The study includes an examination of the controversy surrounding *testimonio* with respect to its status as a literary genre and the question of appropriation of marginalized voices. Texts may include journalistic prose, essay, biography, and oral manifestations of subaltern groups. Authors may include Burgos/Menchú, Barnet/Montejo and Davis/Pablo.

SPAN 471 *The Art of Persuasion: the Hispanic Essay* (3 credits)

Prerequisite: SPAN 301, 303, or equivalent. This course examines the genre of essay writing in Spain and/or Spanish America. A concise historical overview traces the development of this genre to the present. The study of different types of rhetorical strategies, discourse, and objectives in essay writing focuses on contemporary texts. Students learn to develop their own skills towards the writing of effective persuasive prose.

SPAN 472 *Discourses of Discovery, Colonization, and Resistance in Spain and Spanish America* (3 credits)

Prerequisite: SPAN 301, 303, 310, or equivalent. This course examines the colonial subject as s/he appears in early modern articulations of the imperial centre and its relation to the colonial periphery, as well as in the emerging centres of Spanish America. Through close textual analysis and critical discussions of representative works by Peninsular and Colonial authors such as Columbus, Las Casas, Sor Juana and el Inca Garcilaso, students investigate topics that may include the rhetorical and legal tropes of discovery and their construction of an abject "other," the historical conditions that inform the chronicles of conquest, and strategies of cultural resistance employed by *criollo* and Amerindian subjects.

SPAN 473 *Literary Translation in Spanish* (3 credits)

Prerequisite: SPAN 301, 306, or equivalent; SPAN 303 previously or concurrently. This course examines the history and principles of literary translation with reference to translation between the Spanish- and English-speaking worlds. Literary translations both from Spanish to English and vice versa are analyzed within a critical context, and students translate essays, short stories, and poetry into both languages. Equal attention is paid to Spanish and English stylistics.

SPAN 474 *Translation for Specific Fields* (3 credits)

Prerequisite: SPAN 301, 306, or equivalent; SPAN 303 previously or concurrently. This course concentrates on the technical and stylistic elements of translation of texts from a variety of fields such as business, journalism, tourism, telecommunications, and international trade. Material to be translated includes actual texts, and activities involve analysis of translation strategies and of terminological challenges pertinent to effective written communication in each domain. Translation is from both Spanish to English and English to Spanish.

SPAN 480 *Tutorial I* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, culture, and translation, to meet the individual student's needs.

SPAN 481 *Tutorial II* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, culture, and translation, to meet the individual student's needs.

SPAN 482 *Tutorial III* (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, culture, and translation, to meet the individual student's needs.

SPAN 483 Tutorial IV (3 credits)

Prerequisite: Permission of the Department. This course consists of guided readings in Spanish language and/or Hispanic literature, culture, and translation, to meet the individual student's needs.

SPAN 490 Honours Essay Tutorial (3 credits)

Prerequisite: Honours status. This course provides the honours candidate with the opportunity to prepare an extensive research essay, on a topic to be chosen by the candidate with the approval of a supervising member of the faculty of the Spanish section.

SPAN 491 Theory and Methods of Literary Analysis (3 credits)

Prerequisite: Honours status or permission of the Department. This course presents students with some of the fundamental concepts of contemporary critical theory and methods, as pertaining to the analysis of Hispanic texts. This course is complementary to SPAN 490.

NOTE: Students who have received credit for SPAN 403 may not take this course for credit.

SPAN 495 Specialization Project (3 credits)

Prerequisite: 30 credits in the specialization program. This course provides the specialization student with the opportunity to complete a major research project chosen by the candidate in consultation with and under the supervision of a member of the faculty of the Spanish section.

SPAN 498 Advanced Topics in Spanish (3 credits)**SPAN 499 Advanced Topics in Spanish** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Linguistics

LING 200 Introduction to Linguistic Science (3 credits)

This course provides an introduction to the principles of general linguistics for beginners in the field. There is an emphasis on synchronic linguistic analysis, with a brief examination of historical and comparative linguistics.

LING 222 Language and Mind: The Chomskyan Program (3 credits)

This course uses language as a tool to examine the workings of the human mind. It approaches the study of language from the perspective of generative grammar as developed by Noam Chomsky and his collaborators. It deals with patterns of linguistic structure, rather than content or meaning. The goal of this course is to develop an understanding of the field of cognitive science (the study of knowledge and the mind/brain) and determine how linguistics fits in with disciplines like the study of vision, auditory perception and reasoning.

NOTE: Students who have received credit for LINZ 222 or for this topic under a LING 398 number may not take this course for credit.

LING 298 Selected Topics in Linguistics (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 300 Sociolinguistics (3 credits)

A study of the beliefs, interrelationships, and values of societal groups as reflected in language. *NOTE: Students who have received credit for LINZ 300 may not take this course for credit.*

LING 315 Syntactic Theory (3 credits)

Prerequisite: LING 200 or LING 222 or equivalent; or permission of the Department. This course represents a survey of contemporary syntactic theory, with a focus on Government-Binding theory and its descendants. Phrase structure, movement, and the relevance of syntactic theory for theories of syntactic acquisition are considered.

LING 320 Semantics (3 credits)

This course introduces the basic notions required for formal analysis of meaning within a theory of language. The central objective is the development of a system for the representation of the logical structure of natural language. Contemporary works in linguistic semantics are critically examined.

LING 330 Sanskrit (3 credits)

Prerequisite: LING 200 or equivalent. This course provides an accelerated introduction to the fundamentals of Sanskrit grammar through the reading of texts, first in transliteration and later in devanāgarī. Particular attention is given to the language of the *Rig-Veda*, and its significance for the reconstruction of Proto-Indo-European.

LING 336 Comparative Indo-European Linguistics (3 credits)

Prerequisite: LING 200 or equivalent. Through a comparative study of the phonology of the various branches of the Indo-European language family (e.g. Indo-Iranian, Hellenic, Italic, Germanic, Slavic, Baltic), this course familiarizes the student with the techniques used in linguistic reconstruction. Emphasis is given to the development and differentiation of languages through time.

LING 341 *Introduction to Romance Linguistics* (3 credits)

A study of the modern Romance languages, especially French, Italian, and Spanish, and their development from Latin.

LING 353 *Psycholinguistics* (3 credits)

Prerequisite: LING 200 or PSYC 200 or equivalent. This course treats current issues in the experimental evaluation of linguistic theories, presenting both methodological concerns and empirical results. Topics covered include sentence processing, speech perception, lexical access and language development.

NOTE: Students who have received credit for this topic under a LING 398 number may not take this course for credit.

LING 372 *Descriptive and Instrumental Phonetics* (3 credits)

Description of speech sounds in articulatory terms. Identification and description of sounds that occur outside the Indo-European family of languages. Description of speech sounds as to their acoustic qualities: frequency, amplitude, pitch, stress. Interpretation of sound spectrograms.

LING 373 *Phonological Analysis* (3 credits)

Prerequisite: LING 200 or equivalent. This course examines the fundamentals of distinctive-feature analysis as developed by Jakobson, Chomsky, and Halle. Theoretical concepts and notational techniques are emphasized. Students receive extensive training in data analysis and rule writing.

LING 380 *Morphology* (3 credits)

Prerequisite: LING 373 or equivalent. This course consists of a survey of linguistic morphology, the study of word structure, and the tools used to perform morphological analysis. The course also gives some consideration to the issues relating to a theory of morphology.

NOTE: Students who have received credit for this topic under a LING 398 number may not take this course for credit.

LING 398 *Selected Topics in Linguistics* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LING 415 *Advanced Syntax* (3 credits)

Prerequisite: LING 315 or equivalent. This course considers current developments in the field of syntactic theory and their application to phenomena such as control, movement out of islands and binding.

NOTE: Students may take this course twice for credit provided the subject matter is different.

LING 420 *Language Change* (3 credits)

Prerequisite: LING 315, 336, 373, or equivalent. This course concentrates on the nature of language change, with an investigation into the relationship between theories of linguistic structure and theories of change. The theoretical foundations of contemporary methods in the study of language change are the central focus.

NOTE: Students who have received credit for this topic under a LING 398 number may not take this course for credit.

LING 421 *Non-Indo-European Structures* (3 credits)

Prerequisite: LING 315, 373, or equivalent. This course is intended to give the student an in-depth acquaintance with the structure of a language which differs markedly from that of familiar Indo-European languages. The course involves working with a native speaker and/or from textual material.

LING 425 *Language Acquisition and Universal Grammar* (3 credits)

Prerequisite: LING 315, 373, or equivalent. This course presents a survey of theoretical and empirical issues in the study of first language (L1) acquisition by children. Particular attention is paid to the role of Universal Grammar and innateness in explaining L1 acquisition, as well as to the significance of fundamental theoretical notions such as the competence/performance distinction.

LING 429 *Interfaces in Linguistic Theory* (3 credits)

Prerequisite: LING 373. This course presents, in considerable depth, current research on the formal relationships which hold between the modules of grammar, e.g. phonology-syntax, or syntax-semantics. The general problem of interfaces, and their relationship to assumptions such as modularity, are discussed. The particular interface covered may vary from year to year.

NOTE: Students may take this course twice for credit provided the subject matter is different. Students who have received credit for a particular topic under a LING 498 number may not take this course for credit unless the subject matter is different.

LING 436 *Advanced Indo-European Studies* (3 credits)

Prerequisite: LING 336 or equivalent. Detailed study of the synchronic and diachronic grammars of one or more Indo-European dialects essential to the reconstruction of the proto-language. Extensive readings are undertaken in both original texts and in scholarly contributions to their elucidation. Emphasis is placed on current issues and research in the field.

LING 437 *Problems in Indo-European Comparative Grammar* (3 credits)

Prerequisite: LING 336 or equivalent. This course explores one or more areas of Indo-European comparative grammar of particular interest in current research. Extensive reading in the scholarly literature is undertaken with emphasis on the principles by which hypotheses in historical linguistics can be framed and the criteria for testing such hypotheses.

LING 446 *Comparative Grammar of Greek and Latin* (3 credits)

Prerequisite: LING 200 or CLAS 280 or 290 or equivalent. A study of the similarities and differences in the phonology and morphology of Ancient Greek and Latin. Some attention is also given to issues of syntax and the lexicon.

LING 447 *Mycenaean Greek* (3 credits)

Prerequisite: LING 200 or CLAS 280 or equivalent. Dating from the 14th to the 12th century BCE, Mycenaean — the language of the Linear B tablets — is the earliest form of Greek attested. In this course, selected documents will be read, both in transliteration and in the Mycenaean syllabary, with attention both to linguistic and to cultural issues.

LING 456 *Homeric Greek* (3 credits)

Prerequisite: LING 200 or CLAS 280 or equivalent. An examination of the language of Homer, an artificial mixture of dialectal and diachronic variants, a *Kunstsprache*. Against the background of a study of the comparative and historical grammar of Greek and its development from Proto-Indo-European, the focus is on diachronic aspects of Homeric grammar and diction. Readings are principally from Books One and Three of the *Iliad*.

LING 457 *Archaic Latin and the Italic Dialects* (3 credits)

Prerequisite: LING 200 or CLAS 290 or equivalent. A study of inscriptions in archaic Latin and the ancient Italic dialects Oscan and Umbrian. Examination of the main features of phonology, morphology, syntax and the lexicon which distinguish Osco-Umbrian from Latin, with reference to their development from Proto-Indo-European.

LING 461 *Hittite* (3 credits)

Prerequisite: LING 336 or equivalent. The fundamentals of Hittite grammar are presented through the extensive reading of texts, both in transliteration and cuneiform. Considerable attention is given to problems of comparative grammar.

LING 473 *Advanced Phonology* (3 credits)

Prerequisite: LING 373 or equivalent. This course treats current issues in the theory of phonology, such as syllable structure, stress computation, vowel harmony and tonology. Critical readings from the current theoretical literature form the basis for discussion and study.

NOTE: Students who have received credit for this topic under a LING 498 number may not take this course for credit.

LING 475 *History of Linguistics* (3 credits)

Prerequisite: LING 315, 336, 373, or equivalent. This course examines the history of linguistics, with a particular focus on the structuralist predecessors of contemporary linguistic theorists. Both North American and European schools of thought are considered. Extensive reading of fundamental texts is required.

LING 490 *Research Seminar in Linguistics* (3 credits)

Prerequisite: Permission of the Department. This course provides students with the opportunity for advanced research in linguistics under the direct supervision of a faculty member. Participants will write a theoretical or experimental paper and present their findings for discussion with fellow students.

NOTE: Students may take this course only once for credit.

LING 495 *Tutorial* (3 credits)

Prerequisite: Permission of the Department. This course provides students with the opportunity to study a topic of individual interest under the guidance of a faculty member.

NOTE: Students may take this course twice for credit provided the subject matter is different.

LING 498 *Advanced Topics in Linguistics* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NON-PROGRAM COURSES:

Hebrew

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

HEBR 210 *Introductory Course in Hebrew* (6 credits)

A beginners' course in Hebrew, with readings of classical and modern texts.

NOTE: Students who have taken Hebrew at the Cegep level, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR 241 *Intermediate Hebrew I* (3 credits)

Prerequisite: HEBR 210 or permission of the Department. This course includes a comprehensive review of Hebrew grammar and syntax and deals with additional details not covered in the introductory course. Practice is provided through compositions and readings of classical and modern Hebrew texts.

NOTE: Students who have received credit for HEBR 250 may not take this course for credit.

HEBR 242 *Intermediate Hebrew II* (3 credits)

Prerequisite: HEBR 241 or permission of the Department. This course continues the comprehensive review of Hebrew grammar and syntax, and deals with additional details not covered in the introductory course. Practice is provided through compositions and readings of classical and modern Hebrew texts.

NOTE: Students who have received credit for HEBR 250 may not take this course for credit.

HEBR 310 *Topics in Hebrew Literature* (3 credits)

Topics for this course will vary; possibilities may include modern Hebrew literature, masterpieces and genres in Hebrew literature, and others. This course is taught in English.

NOTE: Please see the Undergraduate Class Schedule for details.

Modern Languages

The following courses give instruction in languages and cultures not included in any of the Department's programs.

MGRK 290 *Modern Greek* (6 credits)

This course provides an introduction to the basic elements of modern Greek for the student with no knowledge of the language.

NOTE: Students who have received credit for this topic under an MODL 399 number may not take this course for credit.

MGRK 398 *Special Topics in Modern Greek* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MIRI 290 *Modern Irish* (6 credits)

This course provides an introduction to the basic elements of modern Irish for the student with no knowledge of the language.

NOTE: Students who have received credit for this topic under an MODL 399 number may not take this course for credit.

MIRI 398 *Special Topics in Modern Irish* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 298 *Special Topics in Modern Languages* (3 credits)**MODL 299 *Special Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 398 *Special Topics in Modern Languages* (3 credits)**MODL 399 *Special Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MODL 498 *Advanced Topics in Modern Languages* (3 credits)**MODL 499 *Advanced Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MRUS 290 *Russian* (6 credits)

This course provides an introduction to the basic elements of Russian for the student with no knowledge of the language.

NOTE: Students who have received credit for RUSS 330 may not take this course for credit.

MRUS 398 *Special Topics in Russian* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.070

COMMUNICATION STUDIES

Faculty

Chair

RAE STASESON, MFA Rutgers, Associate Professor

Distinguished Professors Emeriti

JOHN BUELL, PhD Montr.

JOHN E. O'BRIEN, s.j., PhD S.Calif.

Professors

CHARLES ACLAND, PhD Ill.

MARTIN ALLOR, PhD Ill.

WILLIAM BUXTON, PhD Berlin

MAURICE CHARLAND, PhD Iowa

MONIKA KIN GAGNON, PhD S.Fraser

YASMIN JIWANI, PhD S.Fraser

BRIAN LEWIS, PhD Iowa

NIKOS METALLINOS, PhD Utah

LORNA ROTH, PhD C'dia.

KIM SAWCHUK, PhD York (Can.)

PETER C. VAN WYCK, PhD McG.

Associate Professors

OWEN CHAPMAN, PhD C'dia.

MIA CONSALVO, PhD Iowa

RICHARD HANCOX, MFA Ohio

ANDRA McCARTNEY, PhD York (Can.)

ELIZABETH MILLER, MFA Rensselaer

TIMOTHY SCHWAB, MFA C'dia.

MATTHEW SOAR, PhD Mass.

JEREMY STOLOW, PhD York (Can.)

Assistant Professors

TAGNY DUFF, MFA C'dia.

SANDRA GABRIELE, PhD C'dia.

KRISTA LYNES, PhD Calif.(Santa Cruz)

Affiliate Professor

CHANTAL NADEAU, PhD Montr.

Affiliate Associate Professor

LESLIE SHADE, PhD McG.

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Communication Studies and Journalism Building, Room: CJ 3.230

514-848-2424, ext. 2555

Department Objectives

The Department of Communication Studies takes a broad approach to the study of media and communication. Its undergraduate programs provide students with the analytical, critical, and creative skills necessary in a communication- and information-rich world.

Facilities

The Department provides the necessary equipment and facilities to accommodate students in laboratory courses. These include production studios, Mac labs, field production equipment for video and film (H.D. and 16mm), editing suites for video and film, digital sound facilities (production and post-production), and intermedia laboratories. The Learning Centre provides resources for supporting media production and studies as well as computers for program students to use. The media gallery is also housed in the Learning Centre.

Department Admission Requirements

The Department of Communication Studies has distinct admission procedures for each of its programs, in addition to the normal admission process of Concordia University. The Department is prepared to receive applications as early as January. Interested candidates should obtain information about admission requirements by visiting the Department's website at coms.concordia.ca.

Graduate Work in Communication Studies

The Department offers a one-year diploma program for students who have completed their undergraduate degree in another field and who desire a concentrated introduction to Communication Studies. It offers an MA in Media Studies for those with an undergraduate degree in Communication Studies or a cognate field. A PhD in Communications is offered jointly with Université de Montréal and UQAM. For details, please refer to the School of Graduate Studies Calendar or contact the Department.

Programs

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

The Department offers three programs of study.

1. **BA Specialization in Communication Studies:** This program consists of 60 Communication Studies credits with the remaining elective credits drawn from outside the Department. It provides students with training in a variety of media and an in-depth understanding of communicative processes and of the social, cultural, persuasive, and aesthetic aspects of media and communication.
2. **BA Major in Communication Studies:** This program consists of 42 credits in Communication Studies with the remaining elective credits drawn from outside the Department. It provides students with training in a variety of media and an understanding of communicative processes and of the social, cultural, persuasive, and aesthetic aspects of media and communication.
3. **BA Major in Communication and Cultural Studies:** This program consists of 42 credits in Communication Studies with the remaining elective credits drawn from outside the Department. It offers a strong theoretical and critical understanding of communicative processes and of the social, cultural, persuasive, and aesthetic aspects of media and communication. It does not offer media production.

Elective credits are understood as courses taken in other departments or Faculties of the University. Credits in Communication Studies or in the Mel Hoppenheim School of Cinema may not be used in lieu of electives.

200-level courses are normally taken in first year, 300-level courses in second year, 400-level courses in third year.

Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 – Programs and Admission Requirements – Profiles).

60 BA Specialization in Communication Studies

18 COMS 210³, 220³, 240³, 274³, 276³, 284³

6 Chosen from COMS 310³, 352³, 357³, 367³, 368³, 369³, 372³, 373³

6-18 Chosen from the list of Practicum Courses

18-30 Chosen from the list of Studies Courses at the 300 or 400 level, with at least 12 credits at the 400 level

NOTE: Students may not take more than one Practicum course in any one term at the 300 or 400 level.

42 BA Major in Communication Studies

18 COMS 210³, 220³, 240³, 274³, 276³, 284³

6 Chosen from COMS 310³, 352³, 357³, 367³, 368³, 369³, 372³, 373³

6-12 Chosen from the list of Practicum Courses

6-12 Chosen from the list of Studies Courses at the 300 or 400 level, with at least six credits at the 400 level

NOTE: Students may not take more than one Practicum course in any one term at the 300 or 400 level.

42 BA Major in Communication and Cultural Studies

Stage I

12 COMS 210³, 220³, 225³, 240³

Stage II

3 COMS 325³

6 Chosen from COMS 310³, 352³, 357³, 367³, 368³, 369³, 372³, 373³

Stage III

3 COMS 425³

18 Chosen from the list of Studies Courses at the 300 or 400 level, with at least nine credits at the 400 level

Practicum Courses

Practicum courses in the Department focus on the development of creative media practices within the context of Communication Studies research based in the humanities and social sciences. These courses include weekly lectures, readings, critical analysis, workshops, seminars, screenings, and presentations.

Practicum Courses

Practicum courses in the Department focus on the development of creative media practices within the context of Communication Studies research based in the humanities and social sciences. These courses include weekly lectures, readings, critical analysis, workshops, seminars, screenings, and presentations. First-year courses include an average of three hours of creative laboratories per week. Second- and third-year courses include an average of eight hours of creative labs and/or fieldwork per week.

COMS 274	Communication Media: Intermedia I (3 credits)
COMS 276	Communication Media: Sound I (3 credits)
COMS 284	Communication Media: Film and Video I (3 credits)
COMS 374	Communication Media: Intermedia II (6 credits)
COMS 376	Communication Media: Sound II (6 credits)
COMS 383	Communication Media: Film II (6 credits)
COMS 385	Communication Media: Video II (6 credits)
COMS 393	Communication Media: Special Topics (3 credits)
COMS 474	Communication Media: Intermedia III (6 credits)
COMS 476	Communication Media: Sound III (6 credits)
COMS 483	Communication Media: Film III (6 credits)
COMS 485	Communication Media: Video III (6 credits)
COMS 493	Communication Media: Advanced Topics (3 credits)

Studies Courses

Studies courses in the Department offer theoretical and critical understandings of social, cultural, formal, and other aspects of human communication and media. These courses may include weekly lectures, readings, critical analyses, seminars, screenings, and presentations.

COMS 210	Media Criticism (3 credits)
COMS 220	History of Communication and Media (3 credits)
COMS 225	Media Institutions and Policies (3 credits)
COMS 240	Communication Theory (3 credits)
COMS 301	Selected Topics in National Cinemas (3 credits)
COMS 304	Selected Topics in Film Studies (3 credits)
COMS 307	Scriptwriting for Media (3 credits)
COMS 308	Selected Topics in Video (3 credits)
COMS 309	Studies in Documentary (3 credits)
COMS 310	Media Genres (3 credits)
COMS 319	Media Literacy (3 credits)
COMS 324	Communication Analysis of Environment (3 credits)
COMS 325	Approaches to Communication Research (3 credits)
COMS 352	Media Policy in Canada (3 credits)
COMS 354	Youth and Media (3 credits)
COMS 355	Media and New Technology (3 credits)
COMS 357	Media and Critical Theory (3 credits)
COMS 360	Mass Communication (3 credits)
COMS 361	Propaganda (3 credits)
COMS 362	Psychology of Communication (3 credits)
COMS 365	History of Sound Recording (3 credits)

COMS 367	Media and Cultural Context (3 credits)
COMS 368	Media and Gender (3 credits)
COMS 369	Visual Communication and Culture (3 credits)
COMS 370	Advertising and the Consumer Culture (3 credits)
COMS 371	Public Relations: Principles and Problems (3 credits)
COMS 372	Theories of Public Discourse (3 credits)
COMS 373	Topics in Media and Cultural History (3 credits)
COMS 394	Communication Studies Apprenticeship I (3 credits)
COMS 395	Communication Studies Apprenticeship II (3 credits)
COMS 398	Selected Topics in Communication Studies (3 credits)
COMS 399	Selected Topics in Communication Studies (6 credits)
COMS 407	Advanced Scriptwriting for Media (3 credits)
COMS 410	Acoustic Communication and Design (3 credits)
COMS 411	Sexuality and Public Discourse (3 credits)
COMS 412	Discourses of Dissent (3 credits)
COMS 413	Cultures of Production (3 credits)
COMS 414	Production Administration (3 credits)
COMS 415	Advanced Topics in the Photographic Image (3 credits)
COMS 416	Film Criticism (3 credits)
COMS 418	Cultures of Globalization (3 credits)
COMS 419	Communications and Indigenous Peoples (3 credits)
COMS 420	Reception Studies (3 credits)
COMS 421	Communicative Performances and Interventions (3 credits)
COMS 422	Perspectives on the Information Society (3 credits)
COMS 423	Media Art and Aesthetics (3 credits)
COMS 424	Alternative Media (3 credits)
COMS 425	Advanced Seminar in Cultural Studies (3 credits)
COMS 426	Television Studies (3 credits)
COMS 434	Advanced Topics in Film Studies (3 credits)
COMS 435	Advanced Topics in Documentary Film and Video (3 credits)
COMS 437	Media Forecast (3 credits)
COMS 453	Communication Ethics (3 credits)
COMS 460	Political Communication (3 credits)
COMS 461	Organizational Communication (3 credits)
COMS 462	Communication, Culture and Popular Art (3 credits)
COMS 463	Semiotics (3 credits)
COMS 464	Race, Ethnicity and Media (3 credits)
COMS 465	Rhetoric and Communication (3 credits)
COMS 468	Communications, Development and Colonialism (3 credits)
COMS 472	Communication Technologies and Gender (3 credits)
COMS 473	International Communication (3 credits)
COMS 496	Directed Study I (3 credits)
COMS 497	Directed Study II (3 credits)
COMS 498	Advanced Topics in Communication Studies (3 credits)
COMS 499	Advanced Topics in Communication Studies (6 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses, unless otherwise indicated, are open to students who have successfully completed 24 university credits or who have received permission from the Department.
- (2) 400-level courses, unless otherwise indicated, are open to students who have successfully completed 48 university credits or who have received permission from the Department.

COMS 210 *Media Criticism* (3 credits)

Prerequisite: Registration in a Communication Studies program. Through lectures, discussions, readings, and critical analyses, this course introduces students to the major schools and practices of media criticism. The course articulates the relationships between formal, aesthetic, representational, and sensory elements of media texts and discourses.

COMS 220 *History of Communication and Media* (3 credits)

Prerequisite: Registration in a Communication Studies program. This course examines communication and media from a comparative and historical perspective. Topics include the transition from orality to literacy, the print revolution, the rise of imaging technologies, and the emergence of modern publics, nations, and global media systems. Assignments introduce methods of historical research.

COMS 225 *Media Institutions and Policies* (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major. This course introduces students to the analysis of the institutional, political, and economic forces that have shaped the development of media during the 20th century. Attention is given to the ownership structures, corporate practices, and state policy interventions affecting media institutions in both the public and private sectors. A particular focus is given to the interrelations between Cultural, Multicultural, and Communication Policy interventions.

NOTE: Students who have received credit for COMS 326 may not take this course for credit.

COMS 240 *Communication Theory* (3 credits)

Prerequisite: Registration in a Communication Studies program. Through lectures, discussions, and selected readings from the works of key theoreticians, this course introduces students to major approaches to the understanding of the process of communication.

COMS 274 *Communication Media: Intermedia I* (3 credits)

Prerequisite: Registration in a Major or Specialization in Communication Studies. This course provides an introduction to new and developing digital technologies (primarily computer-based media) through historical, theoretical, and critical perspectives on media, culture, and society. This includes basic concepts in software operating systems, communication design, and digital media creation.

NOTE: Students who have received credit for COMS 256 may not take this course for credit.

COMS 276 *Communication Media: Sound I* (3 credits)

Prerequisite: Registration in the Major or Specialization in Communication Studies. This course introduces students to acoustic, analog, and digital components of audio systems. Students explore the communicational and aesthetic characteristics of sound. Through practical exercises students learn how to structure sound into imaginative aural forms across various media.

NOTE: Students who have received credit for COMS 278 may not take this course for credit.

COMS 284 *Communication Media: Film and Video I* (3 credits)

Prerequisite: Registration in the Major or Specialization in Communication Studies. This course provides a foundation in the creative, critical, and technical aspects of 16mm film and digital video production, including an introduction to non-linear editing software. Through collaborative assignments, students discover the shared and distinct language of each medium.

NOTE: Students who have received credit for COMS 280 and 282 may not take this course for credit.

COMS 298 *Selected Topics in Communication Studies* (3 credits)**COMS 299 *Selected Topics in Communication Studies* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 301 *Selected Topics in National Cinemas* (3 credits)

Prerequisite: See N.B. number (1). This course focuses on selected national cinemas. The analytic perspective of the course varies but may encompass such issues as cultural contexts; aesthetic conventions; economic and policy constraints; and the history of canons and their renewals. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for this topic under a COMS 303 number may not take this course for credit.

COMS 304 *Selected Topics in Film Studies* (3 credits)

Prerequisite: See N.B. number (1). The topic of this course varies but may include such issues as film theories; the political economy of cinema; the analysis of particular periods in film history; the analysis of the films of particular directors and/or producers; film policies, or the relations between film, video, and television. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for this topic under a COMS 302 number may not take this course for credit.

Communication Studies students may take no more than six credits from the Mel Hoppenheim School of Cinema in the Faculty of Fine Arts.

COMS 307 *Scriptwriting for Media* (3 credits)

Prerequisite: See N.B. number (1); registration in a Major or Specialization in Communication Studies; submission of a sample of creative writing by June 30 and subsequent approval by the instructor. This course is designed to provide knowledge of and practice in the forms and formats of scripts for media. Topics include the anatomy of a script, the relation between audio and visual elements, and the specificity of particular narrative and non-narrative genres. Emphasis is placed upon formal structures, such as story construction and plot development, character and dialogue, tension, conflict, resolution, and harmony.

NOTE: Students who have received credit for COMS 305 or 330 may not take this course for credit.

COMS 308 *Selected Topics in Video* (3 credits)

Prerequisite: See N.B. number (1). This course investigates a variety of video practices from the 1960s to present. These practices range from video as a political tool to video art and installation. Students gain an understanding of the critical and creative uses of video as a tool for communication and change.

COMS 309 Studies in Documentary (3 credits)

Prerequisite: See N.B. number (1). This course offers a survey of documentary genres in various media. Topics include the characteristic styles and forms of documentary, the function of documentary, and its relationship to truth and knowledge. The course consists of lectures, screenings, readings, critique, and discussion.

NOTE: Students who have received credit for COMS 306 and 331 may not take this course for credit.

COMS 310 Media Genres (3 credits)

Prerequisite: See N.B. number (1). This course presents the concept of genre as a framework for the study of media. Topics may include the history of development of genre theory, the distinctive fictive and non-fictive genres of particular media, and the analysis of emergent or hybrid genres.

COMS 319 Media Literacy (3 credits)

Prerequisite: See N.B. number (1). This course provides students with an overview of the fundamental principles governing visual media, in particular video, film, and computerized images. Emphasis is placed on the techniques applied in the construction of media images and particular messages. These media and media products are examined according to the criteria taken from perceptual, cognitive, and aesthetic theories of visual communication.

NOTE: Students who have received credit for this topic under a COMS 398 number may not take this course for credit.

COMS 324 Communication Analysis of Environment (3 credits)

Prerequisite: See N.B. number (1). This course analyzes communicational aspects of various sites such as museums, galleries, exhibitions, countrysides, landscapes, city streets, highways, department stores, and churches. These analyses are conducted from perspectives such as film locations work, interpretive writing, cultural studies, and soundscape research. Students take part in individual and group analyses of Montreal locations. Lectures, tutorials, and workshops.

COMS 325 Approaches to Communication Research (3 credits)

Prerequisite: Registration in Communication and Cultural Studies Major; COMS 225. This course introduces students to the logics of inquiry of the major research approaches used within Communication and Cultural Studies. It familiarizes students with the formation of research questions, the choice of appropriate methodological tools, and the interpretation and reporting of research findings. There is a particular focus on qualitative approaches to field research and discourse and textual analysis.

COMS 352 Media Policy in Canada (3 credits)

Prerequisite: See N.B. number (1). This course acquaints the student with the historical development of media policy in Canada. It examines the government regulation of media as well as the strategies that have been put in place to foster and guide the development of media and cultural industries. It also considers the present state of broadcasting, telecommunications, and Internet policies in Canada, focusing on current problems and exploring alternative solutions.

COMS 354 Youth and Media (3 credits)

Prerequisite: See N.B. number (1). This course explores the forms of communication that have developed between media and youth, including children and adolescents. Topical areas include future policies and planning in the light of developmental needs, ethical parameters, and experiments in creative empowerment.

COMS 355 Media and New Technology (3 credits)

Prerequisite: See N.B. number (1). This course examines the applications of computers in the field of communications from conceptual, theoretical, and practical perspectives. Analog and digital representation, transmission, storage, and processing of visual and aural information are discussed.

COMS 357 Media and Critical Theory (3 credits)

Prerequisite: See N.B. number (1). This course focuses on key authors and readings in critical theory, including the work of the Frankfurt School, British Cultural Studies, structuralism, post-structuralism, and contemporary continental philosophy. A central concern is to understand the nature of power in the modern media environment.

COMS 360 Mass Communication (3 credits)

The course examines the nature and forms of mass communication, the social sources and uses of mass communication, its psychology, audiences, and effects. The ethics of mass communication are also discussed. Through guest lecturers from the various media and readings of contemporary analyses/critiques, issues such as media ownership and access, government and self-regulation, technological implications, and media accountability are raised.

NOTE: Students who have received credit for COMZ 360 may not take this course for credit.

COMS 361 Propaganda (3 credits)

Prerequisite: See N.B. number (1). The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with it. Course methodology includes lectures, discussions, and projects.

NOTE: Students registered in a Communication Studies program may not take this course for program credit but may take it for degree credit.

COMS 362 Psychology of Communication (3 credits)

Prerequisite: See N.B. number (1). The objectives of the course are to provide the learner with: 1) an overview of psychological processes active in the communicative act; 2) the opportunity to explore a single media area in depth, either independently or in a

small group. Through a variety of formats, topic areas such as the following are explored: perception and information processing, language development, areas of para-psychology related to communication, influences on attitude/behaviour, verbal/non-verbal codes, and meaning.

COMS 365 *History of Sound Recording* (3 credits)

Prerequisite: See N.B. number (1). This course traces the technological development of sound recording and establishes the historical context and the social and economic conditions in which this development has occurred. The evolution of studio recording practices, the structure of the music industry and its global operations, changes in the production and consumption of music, and changes in the role of music as a form of cultural communication are examined. Attention is also given to sound recording practices in cinema, radio, television and digital media.

COMS 367 *Media and Cultural Context* (3 credits)

Prerequisite: See N.B. number (1). This course examines the contested notions of culture and diversity as they relate to interpersonal and mediated communication. It focuses on ways in which different cultural communities critique and access a range of cultural forms, on issues and challenges of cross-cultural communications, and on media representational practices, challenges, and problematics.

COMS 368 *Media and Gender* (3 credits)

Prerequisite: See N.B. number (1). This course investigates how sex and gender are represented in and by the media. The course examines sexuality, sexism, and theories of gender through a critical examination of contemporary media topics.

COMS 369 *Visual Communication and Culture* (3 credits)

Prerequisite: See N.B. number (1). This course introduces the basic principles of visual forms of communication, and considers the relationship of visual and verbal components within media messages. It also presents various modes of visual communication, considers their place within cultural understandings of representation, and examines the place of the visual within contemporary culture.

COMS 370 *Advertising and the Consumer Culture* (3 credits)

Prerequisite: See N.B. number (1). This course critically examines the place of advertising in contemporary society. Topics may include the analysis of communication strategies, the construction of desire, the significance of advertising to the production and circulation of commodities, and the role of advertising and consumption in the construction of social identity.

NOTE: Students who have received credit for COMS 470 may not take this course for credit.

COMS 371 *Public Relations: Principles and Problems* (3 credits)

Prerequisite: See N.B. number (1). This course considers the principles and responsibilities of public relations, and critically examines specific problems and the role of media choices and practices in effecting solutions.

NOTE: Students who have received credit for COMS 471 may not take this course for credit.

COMS 372 *Theories of Public Discourse* (3 credits)

Prerequisite: See N.B. number (1). This course presents a variety of theoretical frameworks that inform the analysis of public communication. Emphasis is placed on cultural, political, and ideological interpretations. Concepts presented are drawn from a number of traditions including rhetoric, hermeneutics, post-structuralism, psychoanalysis, semiotics, and deconstruction.

COMS 373 *Topics in Media and Cultural History* (3 credits)

Prerequisite: See N.B. number (1). This course offers an in-depth examination of specific periods or issues in media and cultural history. Selected topics focus on the development of media forms or cultural practices, as well as their social and political consequences. Historiographic research methods and theories are addressed.

COMS 374 *Communication Media: Intermedia II* (6 credits)

Prerequisite: COMS 274; permission of the Department. This course continues the exploration of concepts in digital communications, primarily computer-based media, and their application to communication design and media production. The course involves historical, theoretical, and critical reflection, a variety of digital production exercises, and intermedia projects.

NOTE: Students who have received credit for this topic under a COMS 399 number may not take this course for credit.

COMS 376 *Communication Media: Sound II* (6 credits)

Prerequisite: COMS 276; permission of the Department. This course explores acoustic communication, focusing on audio production techniques associated with various media, including radio, film, video, television, music recording, and intermedia. Students develop technical skills in sound creation and a critical awareness of the social and historical contexts of sound production and reception.

NOTE: Students who have received credit for COMS 378 may not take this course for credit.

COMS 383 *Communication Media: Film II* (6 credits)

Prerequisite: COMS 284; permission of the Department. This intermediate course focuses on the aesthetic, theoretical, practical, and creative aspects of communication in cinema. Students shoot 16mm film, with post-production on digital video. Innovative approaches to technical and financial constraints, to required lengths and delivery dates, are emphasized.

NOTE: Students who have received credit for COMS 381 may not take this course for credit.

COMS 385 Communication Media: Video II (6 credits)

Prerequisite: COMS 284; permission of the Department. This course explores aesthetic, critical, and theoretical issues through the development of artistic voice, concept, and audience. Students develop collaborative projects that use a range of visual and aural strategies. Workshops emphasize technical training in camera, sound, lighting, and editing.

NOTE: Students who have received credit for COMS 387 may not take this course for credit.

COMS 393 Communication Media: Special Topics (3 credits)

Prerequisite: COMS 274, 276 or 284; submission of a portfolio and project proposal to instructor and permission of the Department. This course involves the development and creation of specialized projects in selected media genres and forms. Emphasis is placed upon conception, design, and execution of media works. Choice of media and types of forms and genres vary from year to year. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for this topic under COMS 379 or 380 may not take this course for credit.

COMS 394 Communication Studies Apprenticeship I (3 credits)

Prerequisite: See N.B. number (1); registration in a Communication Studies program; permission of the Department. With approval from the BA program director, students are given the opportunity to work in the communications industry under the co-supervision of a faculty member and a media professional. Students may be accepted for an open apprenticeship position offered to the Department, or they may formulate a study proposal on their own initiative. In order to receive credit, such an apprenticeship proposal must be approved by the BA program director.

NOTE: Students who have received credit for COMS 494 may not take this course for credit.

COMS 395 Communication Studies Apprenticeship II (3 credits)

Prerequisite: See N.B. number (1); registration in a Communication Studies program; permission of the Department.

NOTE: Students who have received credit for COMS 394 may register for COMS 395.

NOTE: Students who have received credit for COMS 495 may not take this course for credit.

COMS 398 Selected Topics in Communication Studies (3 credits)**COMS 399 Selected Topics in Communication Studies** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

COMS 407 Advanced Scriptwriting for Media (3 credits)

Prerequisite: See N.B. number (2); COMS 307; submission of a sample of creative writing and subsequent approval by the instructor. This course provides an in-depth approach to writing for specific media. Emphasis is placed upon structure, storytelling, research, and the interplay of character and action. Different paradigms for both fiction and non-fiction are considered.

NOTE: Students who have received credit for COMS 305 or 330 may not take this course for credit.

COMS 410 Acoustic Communication and Design (3 credits)

Prerequisite: See N.B. number (2). This course investigates contemporary theories of acoustic communication and design, such as Attali's concept of noise, Schaeffer's theory of the sound object, Schafer's concept of soundscape, Chion's cinema for the ear, and Augoyard's repertoire of sound effects. Students engage in critical analysis of selected sound texts from various media.

COMS 411 Sexuality and Public Discourse (3 credits)

Prerequisite: See N.B. number (2). This course analyzes and explores the ways sexuality circulates in and as public discourses. Through a variety of conceptual formations and critical conceptualizations of "the public" and "sexuality," this course analyzes conceptually and critically how sexuality and the notion of the public are mutually constitutive. The seminar is interdisciplinary and draws upon works in feminist studies, queer theory, political philosophy, history, cultural studies, and communication theory.

COMS 412 Discourses of Dissent (3 credits)

Prerequisite: See N.B. number (2). This course examines the forms and tactics of public discourses directed toward social change. Forms of public discourse that may be considered include speech, images, audiovisual works, as well as web-based sites or forms of communication. Emphasis is placed upon political protest, conflict and controversy, and mobilization. Themes explored include the development of speaking positions, the use of unconventional tactics, and the appropriation or rejection of received values.

COMS 413 Cultures of Production (3 credits)

Prerequisite: See N.B. number (2). Drawing on a range of recent field studies exploring the creative workplace (e.g. television production, the fashion industry, ad agencies, graphic design companies, the music business), this course frames commercial cultural production as a site of active agency, negotiation, and constraint through readings, discussion, and the design and execution of field research projects.

COMS 414 Production Administration (3 credits)

Prerequisite: See N.B. number (2). This course focuses on the language, skills, and strategies necessary for producing media projects and events. Administration, organization, permits and permissions, fundraising, liability and contracts, team-building, distribution and writing are just a few of the areas that are examined as students learn the skills necessary to be a producer.

COMS 415 *Advanced Topics in the Photographic Image* (3 credits)

Prerequisite: See N.B. number (2). This course explores the themes and concerns associated with particular photographic practices. Through class discussion, visual materials, readings, and writing projects, students develop a critical understanding of the history, language, and aesthetics of the photographic image.

COMS 416 *Film Criticism* (3 credits)

Prerequisite: See N.B. number (2). This course provides an introduction to the assumptions, methodologies, and vocabularies implicit in important schools of popular and academic film criticism.

COMS 418 *Cultures of Globalization* (3 credits)

Prerequisite: See N.B. number (2). This course examines the significance of communication technologies to the process of globalization, which has increased and accelerated the movement of people and commodities across the world. The resulting transnational networks of cultural, economic, political, and social linkages and alliances are considered, as is the role of media in engendering new forms of community and identity.

COMS 419 *Communications and Indigenous Peoples* (3 credits)

Prerequisite: See N.B. number (2). Focusing on Canadian First Peoples territories in the North and South, as well as selected circumpolar regions, such as parts of Australia and other areas of the world inhabited by indigenous peoples, this course examines from a global perspective the historical, theoretical, and cross-cultural content and contexts of aboriginal media financing, audience research, product development, distribution issues, and policy formation. Broadcasting, print, and digital media case studies and materials are central components.

COMS 420 *Reception Studies* (3 credits)

Prerequisite: See N.B. number (2). This course examines recent theory and research trends in the area of media reception studies and audience agency. Topics may include discursive, institutional, observational, and ethnographic approaches through readings, discussion, and the design and execution of field research projects.

COMS 421 *Communicative Performances and Interventions* (3 credits)

Prerequisite: See N.B. number (2). This course examines how media can be used in order to intervene in social and cultural issues. Emphasis is placed upon the performative character of interventions: they occur at a particular time and in a particular place, they are addressed to and seek to move particular audiences. Topics may include the history of performance strategies, the social and political character of aesthetic interventions, and the forms of such performances in relation to various media of communication.

COMS 422 *Perspectives on the Information Society* (3 credits)

Prerequisite: See N.B. number (2). This course critically examines the political, social, and ethical dimensions of the information society within Canada and throughout the world. The development of the information society is placed in a socio-historical context. The significance of information and communication technologies is considered and the role of global information and communication policies is examined.

COMS 423 *Media Art and Aesthetics* (3 credits)

Prerequisite: See N.B. number (2). This course examines the aesthetic principles pertinent to the analysis and creation of works within communication media. Topics may include the field of perception, the role of cognition, the elements of composition, and the interplay of form and meaning. Both the static and dynamic aspects of visual and aural elements are considered.

COMS 424 *Alternative Media* (3 credits)

Prerequisite: See N.B. number (2). This course examines various alternatives to mainstream media. These alternatives may include community radio and video, independent film, the Internet, and other emergent cultural forms such as the pastiche and parody of "culture jamming." The concepts of mainstream and alternative are explored and the relationship between alternative media and social practices is considered.

COMS 425 *Advanced Seminar in Cultural Studies* (3 credits)

Prerequisite: Registration in the Communication and Cultural Studies Major; see N.B. number (2). This course offers an intense examination of a prominent contemporary debate and/or issue in cultural studies. Students work toward the completion of a major research assignment.

COMS 426 *Television Studies* (3 credits)

Prerequisite: See N.B. number (2). This course examines recent research focusing on television. Topics may include technological and industrial changes, audience activity, new genres, and representational conventions.

COMS 434 *Advanced Topics in Film Studies* (3 credits)

Prerequisite: See N.B. number (2). This course provides an in-depth study of a selected area of film studies. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 435 *Advanced Topics in Documentary Film and Video* (3 credits)

Prerequisite: See N.B. number (2). This course provides an in-depth study of selected film and video documentary genres. Specific topics for this course will be stated in the Undergraduate Class Schedule.

COMS 437 *Media Forecast* (3 credits)

Prerequisite: See N.B. number (2). This course examines trends in film, sound, television, and other media for future applications. The course includes theory of media effects. Representatives from industry and government are invited to discuss future trends in media utilization. The course demands a theoretical and practical model for original or novel use of a medium or media mix.

COMS 453 *Communication Ethics* (3 credits)

Prerequisite: See N.B. number (2). This course allows students to confront issues of creative responsibility and ethical dilemmas in media practice. Emphasis is placed upon the relationship between production and theory at the level of ethical responsibility. Specific issues include ethical theories as applied to media, communication and information; the relationship of human values and technologies of information reproduction; the possibilities of critical media practice; identification of challenges emerging from experience in Communication Studies.

NOTE: Students who have received credit for JOUR 316 or 317 may not take this course for credit.

COMS 460 *Political Communication* (3 credits)

Prerequisite: See N.B. number (2). The relationships between forms of communication and political structures and processes are examined. Topics include freedom of expression, the role of communication in mediating conflict, the place of deliberation and debate in democracy, political campaigns and advertising, and the relationship between styles of communication and models of governance.

COMS 461 *Organizational Communication* (3 credits)

Prerequisite: See N.B. number (2). This course considers major approaches to organizational communication in relation to shifting patterns of power, inequality, and technological change. Topics include communication networks, organization culture, bureaucracy, systematically distorted communication, gendered communication, the impact of new communication technologies, and patterns of organizational dominance and resistance. Case studies of particular organizations are examined.

COMS 462 *Communication, Culture, and Popular Art* (3 credits)

Prerequisite: See N.B. number (2). This course offers an advanced examination of popular culture. With attention to such phenomena as hit films and television shows, stars, fans, and pop art, this course focuses on the formation of hierarchies of value in cultural forms. This course examines how some cultural products come to be celebrated while others are dismissed. It also considers social and political consequences of divisions of high and low culture.

COMS 463 *Semiotics* (3 credits)

Prerequisite: See N.B. number (2). This course provides a detailed introduction to the semiotics of communication. The course considers the formal characteristics of signs and codes and examines how signs or texts produce meaning. Central to this course is the notion that sign-systems are fundamental to the production of knowledge and ideology. The course proceeds through lectures, an analytical reading of assigned texts, and student discussion and presentations.

COMS 464 *Race, Ethnicity and Media* (3 credits)

Prerequisite: See N.B. number (2). This course addresses practical and theoretical issues of race and ethnicity that have become focal points for current debates in public cultural expression and media studies. The following themes are discussed: cultural/racial difference and its implications for media studies; the (mis)representation of multicultural and multiracial minorities in mainstream and alternative media; questions of access to arts and other cultural funding sources; implications of employment equity legislation in light of media budget cuts; and cross-cultural awareness programs vs. anti-racist training for media professionals. Theoretical readings which frame issues of cultural and racial representation are an integral part of this course.

COMS 465 *Rhetoric and Communication* (3 credits)

Prerequisite: See N.B. number (2). This course focuses upon communication as persuasive or as producing identification. Emphasis is placed upon the role of communication in civic affairs. Classical and contemporary approaches to rhetorical theory and criticism are examined.

COMS 468 *Communications, Development and Colonialism* (3 credits)

Prerequisite: See N.B. number (2). This course discusses the role media can play in indigenous and international development. The concept of development communications is examined in the context of debates within neo-colonial and post-colonial theories.

COMS 472 *Communication Technologies and Gender* (3 credits)

Prerequisite: See N.B. number (2). Feminist theories of communication technologies are used to critique the impact and meanings of these technologies in various spheres of cultural activity. Topics include the mass media, technological mediations in organizations and institutions, and the re-articulation of domestic and public spaces, such as the Internet and the World Wide Web. Special attention is paid to these electronic and digital technologies — or new media — and the communicational and representational possibilities they enable or foreclose. The class is conducted as an intensive seminar. Completion of a prior course in women's studies or gender studies at the university level is recommended.

COMS 473 *International Communication* (3 credits)

Prerequisite: See N.B. number (2). This course explores historical and current parameters of international communications within the context of current global shifts in power/knowledge relations. Discussion topics are selected from among the following: key

development and neo-colonial theories, cultural/media imperialism, globalization, the UN infrastructure, the Right to Communicate debates, national sovereignty issues, international broadcasting, cross-cultural audience reception research and effects theories, telediplomacy, the World Wide Web and the Internet, women as an international constituency group, and others.

COMS 474 *Communication Media: Intermedia III* (6 credits)

Prerequisite: COMS 374; permission of the Department. This is an advanced course in intermedia theory and creation, exploring the interrelationships among communication design, interactivity and computer-based media production, through a variety of digital production exercises and substantial intermedia projects.

NOTE: Students who have received credit for COMS 490 may not take this course for credit.

COMS 476 *Communication Media: Sound III* (6 credits)

Prerequisite: COMS 376; permission of the Department. This advanced course involves analysis and creation of substantial audio projects such as sound documentaries, song cycles, soundscape projects, multi-layered soundtracks, and audio installations. Emphasis is placed on creative portfolio development and public presentation.

NOTE: Students who have received credit for COMS 478 may not take this course for credit.

COMS 483 *Communication Media: Film III* (6 credits)

Prerequisite: COMS 383; permission of the Department. This advanced course focuses on the conception, development, and production of portfolio quality films. Formats include the use of Super 16mm and digital post-production. Students develop advanced production skills and are introduced to film financing and distribution.

NOTE: Students who have received credit for COMS 481 may not take this course for credit.

COMS 485 *Communication Media: Video III* (6 credits)

Prerequisite: COMS 385; permission of the Department. This advanced course emphasizes the formal and conceptual challenges of developing a personal voice and production style in the creation of portfolio-ready work. Through media analysis and writing, students develop an understanding of aesthetic and critical aspects of digital video. Production resources, funding, and exhibition opportunities are investigated.

NOTE: Students who have received credit for COMS 487 may not take this course for credit.

COMS 493 *Communication Media: Advanced Topics* (3 credits)

Prerequisite: COMS 374, 376, 383 or 385; submission of portfolio and project proposal to instructor and permission of the Department. This course involves the development and creation of specialized projects in selected media genres and forms. Emphasis is placed upon conception, design, and execution of media works. Choice of media and types of forms and genres vary from year to year. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

No more than six credits may be taken in Apprenticeships or Directed Study. The appropriate Cluster for Apprenticeship and Directed Study courses is determined by the course content as outlined in the student proposal.

COMS 496 *Directed Study I* (3 credits)

Prerequisite: Registration in a Communication Studies program. Towards the end of their second year, students enrolled in a Communication Studies program who have demonstrated scholarly and creative ability may be selected for major research or production in a communications area of special interest. During the third year, individually or in teams, the project is realized in close collaboration with faculty directors.

NOTE: Students who have received credit for COMS 495 may not take this course for credit.

COMS 497 *Directed Study II* (3 credits)

Prerequisite: Registration in a Communication Studies program.

NOTE: Students who have received credit for COMS 496 may register for COMS 497.

COMS 498 *Advanced Topics in Communication Studies* (3 credits)

COMS 499 *Advanced Topics in Communication Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.080

ECONOMICS

Faculty

Chair

M. GREGORY LEBLANC, PhD Qu., Associate Professor

Distinguished Professor Emeritus

GORDON FISHER, PhD S'ton.

Professors

SYED AHSAN, PhD McM.

PAUL GOMME, PhD W.Ont.

NIKOLAY GOSPODINOV, PhD Boston Coll.

IAN IRVINE, PhD W.Ont.

JAMES McINTOSH, PhD L.S.E.Lond.

FRANK MÜLLER, PhD Ruhr.

ECKHARD SIGGEL, PhD Tor.

WILLIAM A. SIMS, PhD Tor.

Associate Professors

BRYAN CAMPBELL, PhD Montr.

EFFROSYNI DIAMANTOUDI, PhD McG.

JØRGEN HANSEN, PhD Gothenburg

NURUL ISLAM, PhD McG.

TATYANA KORESHKOVA, PhD W.Ont.

MING LI, PhD Wis. (Madison)

DIPJYOTI MAJUMDAR, PhD I.Stat.I.

DAN OTCHERE, PhD McG.

SZILVIA PÁPAI, PhD Cal. Tech.

ARTEM PROKHOROV, PhD Mich.State

MICHAEL SAMPSON, PhD Qu.

ARTYOM SHNEYEROV, PhD Northwestern

CHRISTIAN SIGOUIN, PhD Br.Col.

Assistant Professors

PROSPER DOVONON, PhD Montr.

DAVID FULLER, PhD Iowa

DAMBA LKHAGVASUREN, PhD Roch.

HUAN XIE, PhD Pitt.

Senior Lecturers

CAROL CHUI-HA LAU, PhD Calg.

IVAN TCHINKOV, PhD S.Fraser

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: H 1155

514-848-2424, ext. 3900

Department Objectives

The Department aims to educate students in economics, both at the graduate and undergraduate level, and to contribute to the advancement of the discipline through research and teaching. Economists study the production, distribution, and consumption of goods and services — essential knowledge for today's business people and policy makers. Blending both theory and practical applications, the Department of Economics serves students preparing for related specialized professions (honours, specialization, co-operative) as well as those interested in a generalized understanding of the discipline (major, minor programs).

Programs

Students are responsible for satisfying their particular degree requirements.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

The superscript indicates credit value.

NOTE: Calculus I is a prerequisite for many Economics courses. Students who have not taken MATH 209 or equivalent must take it as an elective within their first 15 credits.

Undergraduate Program Director

CAROL CHUI-HA LAU

BA DEGREE PROGRAMS IN ECONOMICS

60 BA Honours in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

6 ECON 325³, 326³

3 ECON 324³

3 Chosen from ECON 318³, 319³

Stage III

6 ECON 401³, 403³

6 ECON 421³, 422³

12 400-level ECON elective credits

60 BA Specialization in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

3 Chosen from ECON 318³, 319³

6 ECON 324³, 325³

3 300-level ECON elective credits

Stage III

3 ECON 421³ or 423³

21 400-level ECON elective credits

42 BA Major in Economics

Stage I

6 *ECON 201³, 203³

6 **ECON 221³, 222³

Stage II

6 ECON 301³, 302³

6 ECON 303³, 304³

3 Chosen from ECON 318³, 319³, 324³

3 300-level ECON elective credits

Stage III

12 400-level ECON credits

30 Minor in Economics

Stage I

6 *ECON 201³, 203³

Stage II

6 ECON 318³, 319³

6 200- or 300-level ECON elective credits

Stage III

12 300- or 400-level ECON elective credits

**Students exempted from ECON 201 and/or 203 are required to replace these courses with ECON elective credits.*

***Any equivalent six credits satisfy this component of the program. See §200.7.*

24 Minor in Analytical Economics

NOTE: MATH 203 or 209; MAST 221; or equivalent are prerequisites for this program. ECON 201, 203, and 325 are waived as prerequisites only for those courses which are taken as part of the minor.

- 3 ECON 222³
- 12 ECON 301³, 302³, 303³, 304³
- 3 Chosen from ECON 318³, 319³
- 3 ECON 324³
- 3 Chosen from ECON 421³, 423³

NOTE: This program is intended for students in Science, Mathematics/Statistics, or Engineering.

BCOMM DEGREE PROGRAMS IN ECONOMICS

- **BComm Major in Economics**
(See §61.60)

BUSINESS STUDIES

- **Certificate in Business Studies**
- **Minor in Business Studies**
(See §61.140)

Economics Co-operative Program

Director

MICHAEL SAMPSON, *Associate Professor*

The Economics co-operative program is offered to students who are enrolled in the BA Honours or Specialization in Economics. Students interested in applying for the Economics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six study terms are interspersed with three work terms. Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Economics co-op committee, which includes the student's advisors.

Please refer to §24 for the schedule of study and work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ECON 201 Introduction to Microeconomics (3 credits)

Introduction to the functioning of the market system; concepts of supply and demand, the role of prices in resource allocation; production decisions by firms. Analysis of differences between competition and monopoly, and the implications for economic efficiency; theories of labour markets and wage determination.

NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 203 Introduction to Macroeconomics (3 credits)

An introductory analysis of aggregate economic activity. The focus is on the principles of determination of the level of employment, national income, real output, inflation, and international balance of payments. The course also analyzes the principles which govern trade relations among countries. These topics are integrated by a discussion of government monetary and fiscal policies to stabilize economic activity.

NOTE: Students who have received credit or exemption for ECON 200 may not take this course for credit.

ECON 221 Statistical Methods I (3 credits)

Prerequisite: Cegep Mathematics 311 or MATH 201 or 206. This course examines elementary probability, permutations and combinations, binomial and normal distribution, as well as analysis and organization of economic data, tests of hypotheses, confidence limits, introduction into linear regression and correlation with applications to economics. *NOTE See §200.7*

ECON 222 Statistical Methods II (3 credits)

Prerequisite: ECON 221; MATH 203 or 209; or equivalent. The course is an introduction to the application of statistical techniques to economic data. Topics discussed include time series, statistical inference, analysis of variance, correlation, regression, and access to economic databases. *NOTE See §200.7*

ECON 251 Economic History Prior to the Industrial Revolution (3 credits)

This course is an introduction to the economic development of the Western world prior to the Industrial Revolution. The emphasis is on economic factors in history: evolution of economic systems, economic growth, development and regression within the context of changing institutional constraints. Interconnections among economic, social, and intellectual change are highlighted.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 252 *Economic History After the Industrial Revolution* (3 credits)

This course is an introduction to the main economic trends in the era of sustained growth and development which accelerated with the Industrial Revolution and continues to the present. The emphasis is on Europe with some coverage of North America and the colonial/ developing world.

NOTE: Students who have received credit for ECON 250 may not take this course for credit.

ECON 298 *Selected Topics in Economics* (3 credits)**ECON 299 *Selected Topics in Economics* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 301 *Intermediate Microeconomic Theory I* (3 credits)

Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. Theory and measurement of demand, theory of consumer behaviour, production, theory of the firm, and cost and revenue analysis.

ECON 302 *Intermediate Microeconomic Theory II* (3 credits)

Prerequisite: ECON 301. Market structures (perfect competition, monopoly, oligopoly), industrial concentration, factor markets, income distribution, economic efficiency, general equilibrium, welfare economics.

ECON 303 *Intermediate Macroeconomic Theory I* (3 credits)

Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. The course introduces basic aggregative models to explore different theories on the determination of national income, interest rates and exchange rates. Topics covered include the definitions and measurements of indicators of economic activity; the components of aggregate supply and aggregate demand; the supply and demand for money; and the dynamics of national debt and deficit. The role of macroeconomic policy, such as fiscal and monetary policy, is also examined.

ECON 304 *Intermediate Macroeconomic Theory II* (3 credits)

Prerequisite: ECON 303. This course builds on the concepts developed in ECON 303 by introducing additional features to the basic models, such as the formation of expectations and attributes of the labour market, and then using these models to explore different theories concerning the determination and the evolution of major aggregate variables, economic growth and business cycles. The role of macroeconomic policy, with an emphasis on Canada, is also examined.

ECON 311 *Economic Development* (3 credits)

Prerequisite: ECON 201, 203. The course investigates comparative economic development, with special attention to problems of capital formation, population growth, quality of labour force, and social and cultural attitudes towards economic modernization. Theories of economic development are evaluated in the context of the realities of historical patterns and the varying degrees of ability to achieve modernization.

ECON 318 *Canadian Economic Policy and Institutions* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to contemporary issues in the domestic economy. It is guided by the application of economic principles to such issues as regional disparities, income distribution and inequality, intra-provincial trade, social security policies, welfare programs, foreign ownership and control, competition policy, government regulation of business, unemployment, inflation, and environmental policy.

NOTE: Students who have received credit for ECON 316 may not take this course for credit.

ECON 319 *International Economic Policy and Institutions* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on economic policies and institutions related to issues such as protectionism, regionalism, and globalization. Selected topics in exchange rate and currency convertibility, liberalization of economic systems, and international economic development are also covered.

NOTE: Students who have received credit for ECON 317 may not take this course for credit.

ECON 324 *Economic Data Analysis* (3 credits)

Prerequisite: ECON 201, 203, 222. The objective of this course is to familiarize students with the techniques of data retrieval, manipulation, and analysis. Particular emphasis is placed on the CANSIM retrieval system, database programs, spreadsheet analysis, and statistical packages. Students learn how to apply the linear regression model to economic data.

NOTE: Students who have received credit for ECON 323 may not take this course for credit.

ECON 325 *Mathematics for Economists I* (3 credits)

Prerequisite: ECON 201, 203; MATH 203 or 209 or equivalent. This course introduces students to core topics in algebra and optimization techniques. The topics covered include vector spaces and linear transformations; matrix operations; characteristic values and vectors; matrix differentiation. In addition, the course covers a review of constrained and unconstrained optimization with economic applications; Taylor series representation, implicit function theorem, and related topics.

NOTE: Students who have received credit for MAST 234 or MATH 251 may not take this course for credit.

ECON 326 *Mathematics for Economists II* (3 credits)

Prerequisite: ECON 325. This course covers more advanced topics in optimization methods and introduces students to techniques in economics dynamics, as well as applications of integration. Topics include quadratic forms and second-order

conditions, Kuhn-Tucker theory, the maximum principle, difference and differential equations, discounting and the rudiments of probability theory.

NOTE: Students who have received credit for MAST 235, MATH 252 or 283 may not take this course for credit.

ECON 331 Money and Banking (3 credits)

Prerequisite: ECON 201, 203. Overview of a monetary economy: nature, forms, and the economic role of money. Monetary standards: markets, prices, and the value of money; the payments system; financial markets. Determinants of size and distribution of wealth portfolios. Supply of money: measure, composition, and size determination. The economic role of commercial banks and non-bank financial intermediaries. Central banking and monetary policy. The international monetary system. (Topics covered within the Canadian banking institutional framework.)

ECON 337 Public Sector Economics (3 credits)

Prerequisite: ECON 201, 203. This course examines government fiscal activity within the context of a market economy. Rationale for public intervention is reviewed in terms of market failure and the consequent inefficiency in resource allocation. An overview of the spending and taxation policies in the Quebec-Canada context is presented. This is followed by an examination of topics such as public-spending growth, public goods, externalities and collective decision making.

NOTE: Students who have received credit for ECON 335 or 336 may not take this course for credit.

ECON 350 Economic History of Canada (3 credits)

Prerequisite: ECON 201, 203. This course introduces the student to Canadian economic development focusing on the period after Confederation. The course treats the subject in a thematic, rather than a chronological, fashion and places emphasis on conflicting schools of thought and their reflection in government policies.

NOTE: Students who have received credit for ECON 351 may not take this course for credit.

ECON 361 Industrial Organization (3 credits)

Prerequisite: ECON 201, 203. This course develops the relationship of the firm to various forms of market structure. The course focuses on the objectives of the corporation, corporate interdependence, and the government control of industry. A study of policy matters centres on anti-trust and corporate regulation, with respect to both the legislative and economic aspects.

ECON 362 Economics of the Firm (3 credits)

Prerequisite: ECON 201, 222. This course stresses the application of economic principles and methodologies to the decision-making process of the firm, with an emphasis on the role of risk and uncertainty. Topics include decision-making criteria, demand analysis and estimation, cost analysis and estimation, pricing theory under various market structures, applied topics in pricing, and the impact of government on the firm. This course is primarily of interest to Commerce students, but is open to others as well.

ECON 377 The Asia-Pacific Rim Economies (3 credits)

Prerequisite: ECON 201, 203. This course focuses primarily on those Asia-Pacific Rim countries that have achieved relatively high growth, and have undergone significant economic transformations over the past two decades. Among other things, it investigates China's transformation towards a market economy, Japanese industrial development strategies, and economic development in Taiwan and South Korea. As well, institutions and associations that reinforce these trends will be studied.

ECON 379 The Irish Economy and the European Union (3 credits)

Prerequisite: ECON 201, 203. This course has a dual objective: to examine economic developments and recent growth in the Irish economy, and to examine the structure and importance of Ireland's participation in the European Union in a global and European context. Particular issues addressed are: high growth in developed economies, migration, taxation policy, integration and trade, currency areas and capital mobility.

NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.

ECON 381 Labour Economics (3 credits)

Prerequisite: ECON 201, 203. The general objective of this course is to acquaint the student with various theoretical and empirical issues in the area of labour economics. Particular emphasis is placed upon the relation between theoretical frameworks and their empirical counterparts in Canada. Topics include the theory of wage determination, the effects of minimum wages, human capital theory, the economics of discrimination, and the economics of the household.

ECON 382 Industrial Relations I (3 credits)

Prerequisite: ECON 201, 203. A study of the general and practical problems that arise in the labour field, such as collective bargaining, the legal framework for the settlement of industrial disputes, the weapons of industrial conflict; the labour movement; contemporary labour issues, such as automation, cost-push inflation, and structural employment.

ECON 386 Economics of Human Resources (3 credits)

Prerequisite: ECON 201, 203. A study of recent contributions by economists to the understanding of and solution to social problems which society currently faces in the areas of crime, health, education, and welfare. In addition, specific federal and provincial governmental policies in these areas are analyzed with the standard tools of economics.

ECON 391 Economics of the Environment (3 credits)

Prerequisite: ECON 201, 203. The subject of this course is environmental quality. It proceeds through an analysis of the relationships among the natural environment, economics, and institutions. The objective is to depict the problem of environmental quality as an economic problem whose solution demands major changes in economic, political, and legal institutions. Attention is also given to

policies of collective environmental actions in which the effective management of common property resources is discussed. The course concludes with a discussion of some broader issues, such as the consistency of improved environmental quality with continued economic and population growth.

ECON 392 *Urban Economics* (3 credits)

Prerequisite: ECON 201, 203. This course focuses on the basic issues of economic growth and stagnation, urban land use, the problems of the urban public economy, and special urban problems, such as transportation, congestion, poverty, housing, urban renewal, and zoning.

ECON 393 *Economics of Uncertainty* (3 credits)

Prerequisite: ECON 201, 203, 222. This course focuses on the basic rules governing the application of statistical concepts such as means, variances, covariances, to the economic aspects of the problem of uncertainty. Applications in micro-economic analysis include economic aspects of insurance as well as issues in finance such as portfolio selection, efficient markets, and the capital-asset pricing models. Applications in macroeconomics include the analysis of business cycles and problems associated with the characterization of expectations as in models of inflation.

NOTE: Students who have received credit for this topic under an ECON 398 number may not take this course for credit.

ECON 398 *Selected Topics in Economics* (3 credits)

ECON 399 *Selected Topics in Economics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ECON 401 *Advanced Microeconomic Theory* (3 credits)

Prerequisite: ECON 222, 302, 326. Selected topics in microeconomic analysis including methodology, general equilibrium analysis, welfare economics; theory of the firm, factor pricing, and income distribution capital theory. Primarily for major, specialization, and honours students.

ECON 403 *Advanced Macroeconomic Theory* (3 credits)

Prerequisite: ECON 222, 304, 326. Selected topics in macroeconomic analysis including construction of models of the economy encompassing the labour, product, and financial markets; the role of monetary and fiscal policies; classical, Keynesian, and post-Keynesian models. Primarily for major, specialization, and honours students.

ECON 409 *History of Early Economic Thought* (3 credits)

Prerequisite: ECON 222, 302, 304. This course covers the evolution of economic thought from the Greek philosophers up to (and including) Classical economics. It seeks to provide the student with an outline of the development of economic analysis in this period.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 410 *History of Modern Economic Thought* (3 credits)

Prerequisite: ECON 222, 302, 304. This course covers the evolution of economic thought from the Historical School to modern controversies in economic reasoning, which includes a comparative treatment of Keynesian economics and Monetarism.

NOTE: Students who have received credit for ECON 408 may not take this course for credit.

ECON 413 *Economic Growth and Fluctuations* (3 credits)

Prerequisite: ECON 222, 302, 304. A review of some theories of causes of economic fluctuations. Discussion of the economic climate and of stabilization policies.

ECON 414 *Economic Development: Policy Analysis* (3 credits)

Prerequisite: ECON 222, 302, 304. This course offers an advanced treatment of selected topics related to issues in economic development. Particular emphasis is placed on models of growth and structural change, such as the two-gap model, input-output analysis, and computable general equilibrium models. Trade and industrial policies, fiscal and financial policies, as well as public-sector policies including taxation, spending, and cost-benefit analysis are also discussed.

NOTE: Students who have received credit for ECON 312 or 411 may not take this course for credit.

ECON 421 *Econometrics I* (3 credits)

Prerequisite: ECON 324, 325 or equivalent. This course develops the simple and multiple classical regression models. The problems of mis-specified structures, multi-collinearity, and forecasting are also presented.

ECON 422 *Econometrics II* (3 credits)

Prerequisite: ECON 421. This course is a continuation of ECON 421. It deals with the problems of random-error correlation, stochastic regressors, and the simulation and the estimation of multiple-equation models.

ECON 423 *Applied Econometrics* (3 credits)

Prerequisite: ECON 222, 302, 304, 325 or equivalent. This course is designed to enable students to apply econometric techniques through computer analysis of case studies in model building. Topics include the analysis of aggregate consumption, construction of price indices, the estimation of production and expenditure functions, estimation and forecasting with univariate time series processes, an application with discrete dependent variables.

ECON 425 *Mathematics for Advanced Study in Economics* (3 credits)

Prerequisite: ECON 222, 302, 304, 326. This course gives students the requisite mathematical background for graduate studies in economics. Topics include algebraic methods, and static and dynamic optimization techniques needed for the study of economic theory and econometrics. Difference and differential equations are also examined.

ECON 432 *Advanced Monetary Theory* (3 credits)

Prerequisite: ECON 222, 302, 304. The nature of the monetarist-Keynesian controversy and critical appraisal of the IS-LM-AS model. Special topics: theory and evidence of term structure of interest rates, post-Keynesian demand for and supply of money in aggregative and disaggregative economic models. Theory of macroeconomic policy. Transmission mechanisms, policy coordination, lags, international constraints, and other problems.

ECON 433 *Financial Economics* (3 credits)

Prerequisite: ECON 222, 302, 304, 325 or equivalent. This course introduces students to the theory and practice of finance as seen from the economist's point of view. In particular, it examines the following topics: the theory of decision making under uncertainty; the basic portfolio models, such as the CAPM and the APT; equilibrium aspects of financial markets, such as the role of arbitrage in the pricing of financial assets; the pricing of derivative securities, such as options.

NOTE: Students who have received credit for this topic under an ECON 498 number may not take this course for credit.

ECON 436 *The Economics of Taxation* (3 credits)

Prerequisite: ECON 222, 302, 304. This course focuses on the effects of taxation on economic behaviour. Major topics considered include the excess burden of taxation in decisions to supply effort, savings and investment, the incidence of corporate taxation, and the design of commodity taxation. Among policy issues, topics such as tax evasion, and the taxation of multinational enterprises are examined.

NOTE: Students who have received credit for ECON 435 may not take this course for credit.

ECON 437 *Economics of Public Expenditure* (3 credits)

Prerequisite: ECON 222, 302, 304. This course examines the economic consequences of public expenditure on the economy. Topics covered include public goods, externalities, the theory of welfare measurement, public investment criteria, pricing policy of public enterprises, public choice and intergovernmental fiscal relations.

NOTE: Students who have received credit for ECON 435 may not take this course for credit.

ECON 442 *International Economics: Trade Theory* (3 credits)

Prerequisite: ECON 222, 302, 304. The basis of international trade, gains from trade, factor-price equalization, the tariff, Canadian commercial policy, trade and development, economic integration.

ECON 443 *International Economics: Finance* (3 credits)

Prerequisite: ECON 222, 302, 304. This course is an introduction to theory of national income determination in open economies with capital mobility. It includes analyses of balance of payments, exchange rate, and the role of monetary and fiscal policies under different exchange rate regimes. Among other issues covered are international policy coordination, optimum currency areas, and features of the international monetary system.

ECON 450 *Advanced Economic History* (3 credits)

Prerequisite: ECON 222, 302, 304. Advanced topics in economic history, with emphasis on the application of economic theory to specific historical questions.

ECON 461 *Industrial Organization* (3 credits)

Prerequisite: ECON 222, 302. This course examines departures from the perfect competition paradigm to analyze economic behaviour in an industrial setting. An industry consists of a number of firms which interact strategically to maximize their profits. Topics addressed include measures of market structure, theories of oligopoly, effects of potential entry, product differentiation and advertising, technological change, vertical integration, and monopoly and merger issues.

ECON 462 *The Corporate Economy* (3 credits)

Prerequisite: ECON 222, 302. This course investigates the nature and behaviour of the firm. Economic rationalizations are presented for organizing production within a firm. The economic effects of various organization structures are examined. Topics addressed include team production, contractual models of the firm, principal-agent theory, tournaments, and the relationship between managers, shareholders, and the outside market.

ECON 463 *Economics of Regulation* (3 credits)

Prerequisite: ECON 222, 302. This course is devoted to an examination of the economic aspects of governmental regulations. Besides a critical review of the economic theories of regulation, the spectrum of the existing regulatory network, and empirical investigations aimed at discerning cost-benefits, the course focuses on the process of regulatory reforms in all aspects of the Canadian economy.

ECON 464 *Game Theory, Information, and Economic Modelling* (3 credits)

Prerequisite: ECON 222, 302, 304. This introductory course on game theory is a collection of mathematical tools to model and analyze strategic interactions in a variety of settings, from economic and social situations to politics and international relations. The course focuses on both non-co-operative and co-operative game theoretic modelling, in particular, strategic and extensive form games, Bayesian games, and coalitional games. Students learn to solve games using the concepts of dominant strategies,

Nash-equilibrium, subgame perfection, Bayesian equilibrium, and the core. Applications may include repeated games, auctions, bargaining, oligopoly games, entry deterrence, pricing strategies, and collusion.

ECON 465 *The Economics of Professional Sport* (3 credits)

Prerequisite: ECON 222, 302, 304. This is a course in applied microeconomic theory. Various observations on the state of professional sports are explained using economic theory. Evidence of the statistical relevance of such explanations is also investigated. Issues addressed include the magnitude of the earnings of professional sports stars; the impact of free agency on competitive balance in sports leagues; the value of professional sports teams to cities, and whether such valuation justifies public subsidization of franchises or arenas.

NOTE: Students who have received credit for this topic under an ECON 498 number may not take this course for credit.

ECON 481 *Advanced Labour Economics I* (3 credits)

Prerequisite: ECON 222, 302, 304. The course deals with advanced topics in labour economics. Consequently, a review of microeconomic concepts such as inter-temporal decision-making, uncertainty, moral hazard, adverse selection and market signalling is needed. The following topics are covered: labour supply and demand, wage differentials, human capital theory, employment relationship theory, unions and wage bargaining, job search theory, implicit contracts, and the theory of unemployment.

ECON 482 *Economics of Personnel and Industrial Relations* (3 credits)

Prerequisite: ECON 222, 302, 304. The main objective of this course is to describe how modern microeconomics and modern labour economics can be used to solve practical human resource and personnel issues. These include hiring and firing practices, optimal payment and compensation structure, unions and strike behaviour.

ECON 483 *Advanced Labour Economics II* (3 credits)

Prerequisite: ECON 222, 302, 304. This course covers a series of topics in labour economics. In the first part of the course, students analyze hiring standards of firms, pay and productivity, and the theory of human capital. The second part focuses on mobility and labour market discrimination.

ECON 485 *Health Economics* (3 credits)

Prerequisite: ECON 222, 302, 304. This course introduces students to the role of economics in health, health care, and health policy. It surveys the major topics in health economics and forms an introduction to the ongoing debate over health care policy. Topics include the economic determinants of health, the market for medical care, the market for health insurance, the role of government in health care, and health care reform.

ECON 491 *Advanced Environmental Economics* (3 credits)

Prerequisite: ECON 222, 302. This course provides a survey, from the perspective of economics, of public issues regarding the use of environmental resources, ecosystems and the management of environmental quality. The course covers both conceptual and methodological topics with recent and current applications. It begins with an introduction to the theory and methods of environmental and natural resource economics and concepts of sustainable development. Then the emphasis is shifted to the optimal use of natural resources, both non-renewable resources (mineral and energy) and renewable resources, and the valuation of environmental resources. In the last part of the course, we examine national and international environmental policy issues, including intergenerational equity and environmental ethics.

ECON 493 *Regional Economics* (3 credits)

Prerequisite: ECON 222, 302, 304. This course introduces the student to the methods and techniques of regional economic analysis, and their application to the problems of regional economies within Canada. Among the micro-economic topics covered are the location behaviour of firms and households, and the factors determining the allocation of land among alternative competing uses. Macroeconomic topics include the measurement and analysis of regional income and growth levels, cyclical changes in those levels, and interregional differences in growth rates. Policy problems pertinent to Canadian regions are stressed throughout the course.

ECON 495 *Economics of Transportation and Communications* (3 credits)

Prerequisite: ECON 222, 302. Congestion problems and solutions, pricing, costs, demand, and regulation in transportation. Some applications to communications.

ECON 496 *Natural Resource Economics* (3 credits)

Prerequisite: ECON 222, 302, 304. This course focuses on the problems of the finiteness of the natural resources base in Canada and in the world, and on an analysis of the demand for and supply of natural resources and energy. The course also discusses the economic aspects of a selected group of conservation measures (financial incentives, reallocation of property rights, regulation).

NOTE: Students who have received credit for ECON 396 or for this topic under an ECON 498 number may not take this course for credit.

ECON 497 *Income Distribution and Economic Inequality* (3 credits)

Prerequisite: ECON 222, 302, 304. This course examines the extent and dimensions of economic inequality among households both domestically and internationally. Topics covered include theories of income inequality, wealth inequality, recent trends in polarization, poverty, intergenerational bequests, the welfare state, and the role of government economic policy.

ECON 498 *Advanced Topics in Economics* (3 credits)

ECON 499 *Advanced Topics in Economics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090

EDUCATION

Faculty

Chair

RICHARD F. SCHMID, PhD *Ariz.State*, Professor

Associate Chair

WILL PENNY, PhD *McG.*, Senior Lecturer

Distinguished Professors Emeriti

HAROLD ENTWISTLE, PhD *Lond.*

ELLEN JACOBS, MEd *Tufts*

PATSY M. LIGHTBOWN, PhD *Col.*

Professors

PHILIP ABRAMI, PhD *Manit.*, Provost's Distinction

JOYCE BARAKETT, PhD *Montr.*

ROBERT BERNARD, PhD *Wash.*

PAUL BOUCHARD, PhD *Montr.*

AILIE CLEGHORN, PhD *McG.*

MIRANDA D'AMICO, PhD *McG.*

NINA HOWE, PhD *Wat.*

Associate Professors

WALCIR CARDOSO, PhD *McG.*

SAUL CARLINER, PhD *Ga.*, Provost's Distinction

LAURA COLLINS, PhD *C'dia.*

ELIZABETH GATBONTON, PhD *McG.*

ARPI HAMALIAN, MA *Amer.of Beirut*

MARLISE HORST, PhD *Wales*

JOANNE LOCKE, MLS *McG.*

SANDRA MARTIN-CHANG, PhD *McM.*

KIM MCDONOUGH, PhD *Georgetown*

M. AYAZ NASEEM, PhD *McG.*

HELENA P. OSANA, PhD *Wis.(Madison)*

HARICLIA PETRAKOS, PhD *McG.*

STEVEN SHAW, PhD *C'dia.*

PAVEL TROFIMOVICH, PhD *Ill.*

DAVID WADDINGTON, PhD *Stan.*

JOANNA L. WHITE, PhD *McG.*

Assistant Professors

ADEELA ARSHAD-AYAZ, PhD *McG.*

SANDRA CHANG-KREDL, PhD *McG.*

ANN-LOUISE DAVIDSON, PhD *Ott.*

SARA KENNEDY, PhD *McG.*

DIANE PESCO, PhD *McG.*

HOLLY RECCHIA, PhD *C'dia.*

VIVEK VENKATESH, PhD *C'dia.*

Senior Lecturer

SARA WEINBERG, MA *C'dia.*

Lecturers

TERESA HERNANDEZ-GONZALEZ, PhD *Complutense Madrid*

HEIKE NEUMANN, MA *C'dia.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
J.W. McConnell Building, Room: LB 579
514-848-2424, ext. 2004

Department Objectives

The Department of Education offers general undergraduate programs as well as two teacher-training programs. The general programs focus on educational issues for lifelong learning, while the teacher-training programs are specifically for Early Childhood and Elementary Education and the Teaching of English as a Second Language. Students receive expert supervision in their field placements and are carefully guided in their methods courses. The Department values creativity and innovation in the teaching/learning environment and instills in its students a sense of responsibility with respect to equality, diversity and non-discrimination.

Programs

(For Teaching of English as a Second Language, see §31.090.1; for Adult Education, see §31.090.2)

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

24 Minor in Education

24 Chosen from EDUC 210⁶, 230³, 240³, 270³, 298³, 299⁶, 305³, 306³, 321³, 398³, 399⁶, 405³, 411³, 422³, 426³, 427³, 450³, 454³, 498³, 499⁶

120 BA Specialization in Early Childhood and Elementary Education

93 Group A

ARTE 201³; EDUC 210⁶, 211³, 222³, 260³, 264³, 295³, 296³, 297³, 301³, 311³, 355³, 380³, 381³, 382³, 384³, 386³, 387³, 388³, 395³, 396³, 400³, 445³, 450³, 454³, 493³, 494³, 495³, 496³; TESL 232³

6 Group B

Chosen from EDUC 230³, 305³, 315³, 321³, 383³, 385³, 405³, 406³, 407³, 411³, 422³, 423³, 426³, 427³, 434³, 498³

21 Group C

Elective credits chosen from a list approved by the Department

NOTE 1: This program is open to full-time students only. In addition to the application submitted to the University, specialization applicants MUST complete an additional application which may be obtained from the Early Childhood and Elementary Education secretary.

NOTE 2: Students may be recommended to the Quebec Teachers Certification Service for a Quebec permanent teaching diploma, valid for teaching kindergarten and cycles 1 to 3 (Grades 1 to 6) provided they have met the following requirements: 1. successfully completing the degree and certification requirements for the BA Specialization in Early Childhood and Elementary Education; 2. satisfying the English language proficiency requirements of the MESRST; and 3. submitting an application to graduate to the Birks Student Service Centre.

To remain in the Early Childhood and Elementary Education Specialization program and to be recommended for certification, students must:

1. achieve at least a "B" grade in each of the following practicum courses: EDUC 295, 296, 297, 395, 396, 493, 494, 495, 496; and
2. achieve at least a "C+" grade in each of the following methods courses: EDUC 222, 301, 355, 380, 381, 382, 383, 384, 385, 386, 387, 388.

Students who obtain a grade that is below the above required level will be placed on conditional standing within the program and will be so informed in writing. Students will be allowed to repeat the course in question only once, the next time the course is given, in order to achieve the required grade. (For the status of this grade as part of the student record, see §16.3.13.)

Students who fail to achieve the above minimum grades in two internships/methods courses (i.e. failing the same internship/methods course twice or two different internships/methods courses) cannot continue in the program and will be required to withdraw from the Early Childhood and Elementary Education Specialization program (see §16.3.13).

45 BA Major in Child Studies

24 EDUC 210⁶, 211³, 250³, 260³, 311³, 374³, 492³

9 From area of primary concentration*

6 From area of secondary concentration*

6 Chosen from EDUC 230³, 315³, 321³, 406³, 411³, 422³, 426³, 498³

*See areas of concentration.

Areas of Concentration

- A. *Administration in Childhood Settings* (9 credits)
9 EDUC 302³, 303³, 402³
- B. *Exceptional Children in Childhood Settings* (9 credits)
9 EDUC 450³, 490³, 491³
- C. *Children and Technology* (9 credits)
9 EDUC 305³, 306³, 405³

For other programs which may be of particular interest to teachers, see §23.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

EDUCATION

EDUC 200 *English Exam for Teacher Certification* (0 credit)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization, Teaching English as a Second Language Specialization, or Art Education Specialization. The regulation governing the awarding of teaching authorization of the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) requires that all students admitted to a teacher education program demonstrate their proficiency in the language of instruction as a condition for certification. To fulfill this requirement, students are required to register and write the exam approved by the MESRST. Students must pass this exam prior to the start of the following internships: EDUC 493, TESL 486 or 487, and ARTE 423.

EDUC 201 *The Nature and Function of Teaching* (6 credits)

An introduction to the purpose, theories, and methods of teaching.

EDUC 210 *Psychology of Education* (6 credits)

This course introduces students to a broad range of content in educational psychology, including its scope and methods, learning motivation, growth and development, adjustment, individual differences, guidance, and concept of self.

EDUC 211 *Child Development I* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. This course provides an introduction to current theory (e.g. cognitive, social-cognitive, social learning) about children's development and covers various domains of development (social, emotional, cognitive, physical) from conception to age 12. The implications of children's development in relation to various contexts (e.g. family, neighbourhood, peers, education) are discussed.

EDUC 222 *Exploring Movement with Children* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. From a multidisciplinary perspective, this course examines the following topics: the relationship between movement and self-knowledge, psychomotor development, and the role of physical activity in primary education. The course addresses the teacher's role in incorporating movement into the curriculum for all children, including those with special needs through the use of specific techniques and activities.

EDUC 230 *Introduction to Philosophy of Education* (3 credits)

This course introduces the student to the content and form of several major educational theories, and to conceptual and logical procedures of philosophizing about education, with particular reference to teaching and learning.

NOTE: Students who have received credit for EDUZ 230 may not take this course for credit.

EDUC 240 *Introduction to Training and Development* (3 credits)

This course provides an overview of the design and development of training in organizations by introducing students to theoretical and practical concepts. Topics explored include the organizational and personal benefits of training, different modes of delivery including e-learning (an instructional systems design approach to training development), the transfer of learned skills to the workplace environment, the evaluation of training, the management of the development process, and trends and successful practices in the field.

NOTE: Students who have received credit for this topic under an EDUC 298 number may not take this course for credit.

EDUC 250 *Library Research Practices in Education* (3 credits)

This course is designed to introduce students to basic library research practices used in the field of education and its related disciplines. It familiarizes students with a variety of information sources in both print and non-print formats. Emphasis is placed on a systematic search strategy and the use and evaluation of these information tools. Topics such as outlining and bibliographic formats are covered as part of the library research process.

NOTE: Students who have received credit for LIBS 250, INST 250, INSZ 250, or for this topic under an LIBS 298 number, may not take this course for credit.

EDUC 260 *Historical and Philosophical Foundations of Early Childhood and Elementary Education* (3 credits)

Prerequisite: 30 credits or permission of the Department; enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies. This course is an introduction to the historical and philosophical foundations of early childhood education.

The development of institutions for the care and education of young children is discussed in relation to changes in the family, concepts of childhood, and educational theories. Students use methods of historical and philosophical inquiry to examine current issues in early education, including school readiness, early literacy, integration, multiculturalism, and public policy. The objective is to provide students with the basis for identifying and critiquing problems in education.

EDUC 264 *Communication: Child, Parent and Teacher* (3 credits)

Prerequisite: 30 credits or permission of the Department; enrolment in Early Childhood and Elementary Education Specialization. This course focuses on the role parents play in the various stages of the child's academic, social, and emotional development. The format for this course is unique in that parents of the children in the observation nursery are involved, and students interact with them by conducting and participating in parent-teacher seminars. Topics include parenting, the impact of the family on the child's classroom behaviour, child abuse, cultural issues, disciplinary measures at home and in school, the coordination of home-and-school academic goals, and achievement motivation.

EDUC 270 *Educational Communication* (3 credits)

In this course, students study fundamental communication skills used by effective instructors. By examining how to write the most basic types of instructional content, including definitions, objectives, descriptions and procedures, and the most common forms of written instructional content, including how-to articles and lesson plans, this practical, writing-intensive course emphasizes effective instructional communication methodologies.

NOTE: Students who have received credit for this topic under an EDUC 298 number may not take this course for credit.

EDUC 295 *Internship I: Prekindergarten Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 296 in the same term and in their first year of the ECEE program. This internship gives students first-hand knowledge of the importance of early education. It permits students to develop preliminary skills in observing, assessing, and meeting the needs of individual children, articulating educational objectives, working effectively with small groups, and planning and implementing a play-based curriculum. Students are placed in a prekindergarten class one day a week for a total of 60 hours.

NOTE: Students who have received credit for EDUC 271 may not take this course for credit.

EDUC 296 *Prekindergarten Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; students must be enrolled in EDUC 295 in the same term. This course supports EDUC 295 by offering a thorough introduction to theoretical and applied aspects of early childhood education through a weekly seminar consisting of lectures, discussions, and video presentations on such topics as the educational and developmental needs of young children, models of education, the role of the teacher, play-based curriculum and instruction, health and safety issues, and the design of appropriate prekindergarten learning environments.

NOTE: Students who have received credit for EDUC 272 may not take this course for credit.

EDUC 297 *Internship II: Observation and Evaluation in Education* (3 credits)

Prerequisite: EDUC 295, 296; enrolment in Early Childhood and Elementary Education Specialization. The purpose of this course is to teach students how to conduct evaluations at the elementary-school level. Students learn observation techniques, documentation procedures, authentic assessment, and formative and summative evaluation. Students learn how to create a dynamic profile of the child and how to prepare reports for parents, administrators, and specialists. Students conduct observations in recognized educational institutions (40 hours).

NOTE: Students who have received credit for EDUC 371, 373, and 375 may not take this course for credit.

EDUC 298 *Selected Topics in Education* (3 credits)

EDUC 299 *Selected Topics in Education* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 301 *Integrating Computers into the Elementary Classroom* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. This course provides an introduction to theoretical and practical knowledge regarding the use of computers in elementary school classrooms. Assignments are designed to provide students with hands-on experience with the computer. Topics include social interaction and equity, problem-solving skills, software evaluation, interactive technologies, and curriculum planning.

NOTE: Students are expected to have some basic computer skills (at least word processing) prior to enrolling in this course. Students with no previous experience in using computers are advised to take INTE 290 before enrolling in this course.

EDUC 302 *Administration in Childhood Settings* (3 credits)

This course provides students with a foundation in administering services for children with a focus on child care. Issues reviewed include quality, the role of government, curriculum, staffing, leadership styles, financial matters, and the organizational framework.

EDUC 303 *Children, Families, and Social Policy* (3 credits)

This course examines social policy as it relates to children and families in Canada. Policies may include such areas as children's rights, child care, education, health, and social welfare.

EDUC 305 *Technology for Educational Change I* (3 credits)

Prerequisite: INTE 290 or permission of the Department. This course provides an introduction to advances in the theory, research, and practice of educational technology. Projects and activities allow for a diversity of interests.

EDUC 306 *Technology for Educational Change II* (3 credits)

Prerequisite: EDUC 305. This course is intended for students who wish to advance their media design and development skills. Building on the theoretical and practical foundations established in EDUC 305, this course provides students with an opportunity to design and develop an instructional package aimed at addressing an identified instructional need.

EDUC 311 *Child Development II* (3 credits)

Prerequisite: EDUC 211; enrolment in Early Childhood and Elementary Education Specialization, or Major in Child Studies; 30 credits. This course is designed to provide students with an in-depth review of the developmental, psychological, and socio-cultural aspects of the child and the family. Emphasis is placed on structural elements related to the modern family (e.g. family size, developmental tasks), family relations (e.g. transition to parenthood, parenting styles, early relationships) and problems and issues (e.g. employed mothers, divorce, child care, cultural differences, teenage mothers).

NOTE: Students who have received credit for EDUC 262 may not take this course for credit.

EDUC 315 *Sexual Health Education for Children and Youths* (3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood and Elementary Education; or 30 university credits and enrolment in the Major in Child Studies or the Minor in Interdisciplinary Studies in Sexuality. By evaluating available resources, practical tools, and curricula in today's Canadian society, this course familiarizes students with approaches to sexual health education that are suitable for working with children and youth in a variety of educational settings, including the home, community agencies, and schools. The importance of gearing education to accommodate different developmental stages, ages, and local social contexts is stressed.

EDUC 321 *Sex Role Socialization in the School* (3 credits)

This course focuses upon how children at the elementary- and secondary-school level are socialized for different work roles, and how work segregation has occurred on the basis of this process. The role of schools and curriculum is examined in relation to cultural changes in social roles.

EDUC 355 *Teaching Ethics and Religious Culture* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization. This course enables students to develop a stimulating and sensitive ethics and religious culture program that promotes children's ability to (a) reflect on ethical questions, (b) demonstrate an understanding of the phenomenon of religion, and (c) engage in dialogue with others. Relevant resource materials are examined and assignments focus upon development of activities for the elementary-level classroom.

NOTE: Students who have received credit for THEO 355 may not take this course for credit.

EDUC 374 *Child Studies Field Experience: Child and Youth Settings* (3 credits)

Prerequisite: 30 credits in the major program; EDUC 302 (recommended). This course is designed to provide students with experience in working with groups of young children and with strategies and techniques to critically examine their own practice and that of experienced educators. The course material focuses on learning how to employ different observational techniques, as well as guiding students in reflective practices so as to connect their fieldwork to theory in child studies. Students are required to participate in a one half-day per week field placement in addition to the regularly scheduled class time. Possible field placements for this course include recreation/community centres, hospitals, daycare centres, libraries, museums, and fine arts centres.

NOTE: Students who have received credit for EDUC 371 may not take this course for credit.

EDUC 380 *Teaching Language Arts I* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course enables students to acquire the necessary skills for developing a stimulating and appropriate language arts program for kindergarten and primary grades. Current theories of literacy development and implications for planning and instruction are addressed. The course focuses on listening, speaking, reading, and writing, emphasizing the integration of language arts activities into other subject areas.

EDUC 381 *Teaching Language Arts II* (3 credits)

Prerequisite: 30 credits including EDUC 380; enrolment in Early Childhood and Elementary Education Specialization. This course is a continuation of EDUC 380 with special emphasis on teaching language arts in Grades 3 to 6. Students become familiar with MESRST program guidelines, and various ways to organize and evaluate their implementation.

EDUC 382 *Teaching Science Concepts in the Elementary Classroom* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course examines areas of science which are relevant to elementary education and emphasizes the development of the spirit of scientific inquiry. Resource materials, teaching methodology, and classroom activities are examined and evaluated in light of the MESRST guidelines. Assignments emphasize developing activities for classroom use.

EDUC 383 *Promoting Moral and Spiritual Attitudes and Values in Children* (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to introduce students to the various issues involving the development of moral judgment and reasoning in children. Cultural, social, cognitive, and emotional factors influencing the growth of morality are discussed. The major focus is on examining methods and techniques to enhance the personal development of positive social behaviours (i.e. helping, sharing, and caring).

EDUC 384 Teaching Social Studies in Elementary Schools (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course examines the teaching of social studies to elementary-school-age children.

EDUC 385 Teaching a Second Language in Early Childhood and Elementary School (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization. This course is designed to give teachers a background in current theories of language acquisition and second language learning. Teaching methodologies such as immersion, enrichment, and core/complementary curricula are studied and resource materials are examined and evaluated. Assignments include the development of appropriate classroom activities at the elementary level.

EDUC 386 Teaching Mathematics I (3 credits)

Prerequisite: 15 credits; enrolment in Early Childhood and Elementary Education Specialization. This course introduces a conceptual analysis of school mathematics and its application to the early childhood and elementary education classrooms. Topics include numeracy acquisition, counting, whole number operations, and problem solving. Emphasis is placed on the development of children's thinking and pedagogical practices aimed at assisting students to think mathematically. Current mathematics curricula are examined and evaluated in this context.

EDUC 387 Teaching Mathematics II (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization; EDUC 386. This course continues a conceptual analysis of school mathematics and its application to the elementary classroom. Topics include fractions, decimals, proportions, per cents, algebraic reasoning, and geometry. Emphasis is placed on the development of children's thinking and pedagogical practices aimed at assisting students to think mathematically. Current mathematics curricula are examined and evaluated in this context.

EDUC 388 Teaching Mathematics III (3 credits)

Prerequisite: 30 credits; enrolment in Early Childhood and Elementary Education Specialization; EDUC 387. This course continues a conceptual analysis of school mathematics and its application to the elementary classroom. Topics include algebra, geometry, probability, statistics, and data analysis. Emphasis is placed on the development of children's thinking and pedagogical practices aimed at assisting students to think mathematically. Current mathematics curricula are examined and evaluated in this context.

EDUC 395 Internship III: Kindergarten Teaching (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 295, 296, 297; students must be enrolled in EDUC 396 in the same term. This internship is an eight-week (200 hours) supervised student-teaching experience in a full-day kindergarten classroom. Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class. Students practise their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines.

NOTE: Students who have received credit for EDUC 473 may not take this course for credit.

EDUC 396 Kindergarten Teaching Seminar (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 30 credits including EDUC 295, 296, 297; students must be enrolled in EDUC 395 in the same term. This seminar complements EDUC 395 by providing the opportunity, means, and impetus for students to reflect critically on their teaching philosophy and practice. Topics include the development of appropriate and stimulating learning environments, Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) kindergarten program guidelines, planning and implementation of learning centres, teaching centres, teaching the "whole" child, teacher-parent relationships, and other current issues in kindergarten education.

NOTE: Students who have received credit for EDUC 474 may not take this course for credit.

EDUC 398 Selected Topics in Education (3 credits)**EDUC 399 Selected Topics in Education** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EDUC 400 Teaching Across the Curriculum (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; EDUC 380. Using language arts and the social sciences as the starting point, this course outlines different models for integrating school subjects in curriculum programming. Special attention is given to social science methodology, thematic planning and project work, and to the use of literature and drama. Students examine the links between the different programs of study developed for Quebec schools by the MESRST, and their overall implications for curriculum planning.

EDUC 402 Diversity Issues in Childhood (3 credits)

Prerequisite: 30 credits. This course explores the diversity of contemporary Canadian childhood, including issues related to immigrant children and families, multilingual issues, and cultural differences in child-rearing. The course reviews theoretical and applied approaches for providing services to children and families from culturally diverse backgrounds.

EDUC 405 Children and Technology (3 credits)

Prerequisite: 30 credits. This course examines the interaction between children and technology from a socio-cultural perspective, including the effects of media such as television, computers, and the Internet. Emphasis is placed on the developing child in the context of communication and technology as related to informal educational activities and play.

EDUC 406 *Educational Aspects of Physical Activity, Health and Wellness* (3 credits)

Prerequisite: EDUC 210 or PSYC 200 or equivalent; 30 credits. This course examines the promotion of physical health and well-being of both adults and children. Using an educational approach, principles from the Psychology of Sports, including stress management, motivation, mental training and goal-setting serve as the foundation from which students learn how to enhance sport or exercise performance and general lifeskills.

EDUC 407 *Enhancing Performance in Sport and Exercise* (3 credits)

Prerequisite: Enrolment in an Education program or permission of the Department. The course covers the application of theory, research, and practice in the field of sport and exercise psychology. Topics covered include attention and concentration, anxiety and arousal, psychological skills training (PST), motivation, the psychology of physical activity and children, as well as the psychology of dealing with injury. A major theme is the development of life skills. Goals of the course include acquiring basic knowledge of concepts, theories, and principles related to the psychology of sports and exercise; learning about research and intervention in the field of applying the knowledge to students' own life course.

NOTE: Students who have received credit for this topic under an EDUC 398 number may not take this course for credit.

EDUC 411 *Toys, Media Literacy and Children's Popular Culture* (3 credits)

Prerequisite: Enrolment in an Education program or permission of the Department. This interdisciplinary course examines the multiple roles that toys and the popular culture of childhood and adolescence can play in relation to development, learning, socialization and identity processes. Topics addressed include cultural and personal meanings constructed around toys, media literacy, the increasing role of new technologies, and issues related to the branding and marketing of toys through the media.

NOTE: Students who have received credit for this topic under an EDUC 498 number may not take this course for credit.

EDUC 422 *Sociology of Education I* (3 credits)

Prerequisite: 30 credits. This course emphasizes sociological concepts and their theoretical and practical applications to the study of education. The focus is on the following: how the education system is structured, how schooling and education fit into the overall social structure, how educational experiences vary for members of different social groups, the role education plays in gender, class, and racial inequalities, the complexity of issues relating to student evaluation and performance, and the role education plays in social change.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 423 *Sociology of Education II* (3 credits)

Prerequisite: EDUC 422. This course considers how a particular sociological viewpoint contributes to our understanding of school life. Topics include family, socialization patterns, teacher and pupil perspectives, and how these are interrelated.

NOTE: Students who have received credit for EDUC 421 may not take this course for credit.

EDUC 426 *Comparative Education I* (3 credits)

Prerequisite: Six credits in Education. This course undertakes the study of the impact of political and cultural differences upon educational systems (for example, the impact of language differences, nationalism, colonialism, neocolonialism, political socialization). The approach is comparative, with particular emphasis on contrasting educational systems and practice in selected countries.

EDUC 427 *Comparative Education II* (3 credits)

Prerequisite: Six credits in Education. This course examines the sources and impacts of educational change from a comparative perspective. Topics include pedagogical alternatives; socio-political alternatives; educational implications of technological change and economic policy; policies of elitism and egalitarianism. Methods include comparative case study and analysis of specific theories of educational innovation.

EDUC 432 *Seminar in Epistemology and Education* (3 credits)

Prerequisite: Six credits in Education, or permission of the Department. Theories of knowledge are considered in this course, with special attention being given to the bearing of such topics as perception, evidence, truth, knowledge, and belief as relating to educational thought and practice. Students are expected to become familiar with recent periodical and other literature in the field.

EDUC 434 *Aesthetics and Education* (3 credits)

Prerequisite: EDUC 230 or permission of the Department. The nature of aesthetic value and experience, and theories of art and beauty are examined. The development of the emotions and imagination, and their functions in aesthetic awareness are central concerns of this course. Students are expected to become familiar with the relevant literature in the field.

EDUC 445 *Education in Quebec* (3 credits)

Prerequisite: 30 credits in a teacher certification program, or holder of a provisional teaching authorization, or permission of the Department. This course covers the history, the contemporary movements, and the structures of Quebec education. The historical section covers the period from 1608 until the present. Topics included are the legislation, regulations, rules, and directives pertaining to the respective roles of the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST), the school boards, the teachers, the parents, and the students in Quebec's educational system.

NOTE: Because this is a required course for all individuals enrolled in a Quebec program of teacher training, the content is controlled by the MESRST.

EDUC 450 *The Inclusive Classroom: Educating Exceptional Children* (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. This course focuses on the education of children with special needs. Emphasis is placed on ways in which classroom teachers can provide appropriate help or instruction to meet the needs of

exceptional children. Topics include identification and assessment of learning needs; adaptation of curriculum and activity design, service delivery models; parent-professional relationships; legislative policies.

EDUC 454 *Diversity in the Classroom* (3 credits)

Prerequisite: 30 credits including EDUC 210 or 211. Students examine the implications of diversity in the classroom for teaching, curriculum, and children's educational experience. Various theoretical approaches are analyzed, including critical pedagogy, multicultural education, and intercultural education. The importance of inclusive curricula is discussed.

EDUC 471 *Supervised Internship* (6 credits)

This course is offered only to students enrolled in the Certificate in Education program. Teaching internship is carried out in the school where the student is employed. The students are supervised and their teaching performance evaluated. The students are expected to demonstrate positive evidence of teaching competence and professional behaviour.

EDUC 480 *Special Methods of Teaching — Elementary* (3 credits)

This course is offered only to students enrolled in the Certificate in Education program. It deals with methods of teaching in the elementary school. Emphasis is placed on the practical application of educational theories.

EDUC 481 *Special Methods of Teaching — Secondary* (3 credits)

This course is offered only to students enrolled in the Certificate in Education program. This course deals with methods of teaching in a high school subject. The course is designed to suit the individual student's field of specialization.

EDUC 490 *The Exceptional Child I* (3 credits)

Prerequisite: EDUC 211 or equivalent; 30 credits in Education, or permission of the Department. This course is an introduction to the educational issues concerning children with special needs. The focus is on inclusive childhood settings. Theoretical models, intervention strategies, and advocacy are issues that are explored.

EDUC 491 *The Exceptional Child II* (3 credits)

Prerequisite: EDUC 490, or permission of the Department. This course is an in-depth exploration of children's experience with intellectual, emotional, and physical disability, and specific interventions that can foster coping, healthy development, and family systems approach.

EDUC 492 *Child Studies Field Experience: Adaptations and Accommodations in Special and Inclusive Settings* (3 credits)

Prerequisite: EDUC 450 (recommended); 30 credits in the major program. This course is designed to provide students with experience in working with children exhibiting a range of developmental, emotional, learning, and social delays. Subject matter is designed to provide links between practical fieldwork and previously studied theory related to the inclusive classroom and children with special needs. Students examine methods of best practice in working with these children, and are required to participate in a one half-day per week field placement in addition to the regularly scheduled class time. Possible field placements for this course include hospitals, elementary schools, and school or community centres for children with psychological, intellectual, or other developmental special needs.

EDUC 493 *Internship IV: Primary Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; EDUC 200 and 60 credits including EDUC 295, 296, 297, 395, 396; students must be enrolled in EDUC 494 in the same term. The internship is an eight-week (200 hours) supervised student-teaching experience in a primary classroom (Grades 1 to 3). Students share in the daily work of their co-operating teachers, and progress gradually from being participant observers working with small groups to taking charge of the whole class as independent, creative practitioners. Students perfect their skills in activity planning, intervention strategies, the evaluation of student learning, and the management of classroom routines.

NOTE: Students who have received credit for EDUC 473 may not take this course for credit.

EDUC 494 *Primary Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 60 credits including EDUC 295, 296, 297, 395, 396; students must be enrolled in EDUC 493 in the same term. The seminar complements EDUC 493 by providing the opportunity, means, and impetus for students to reflect critically on their teaching philosophy and practice. Topics include the development of appropriate and stimulating learning environments, Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) primary program guidelines, planning and implementation of curriculum units, teacher-parent relationships, and other current issues in primary education.

NOTE: Students who have received credit for EDUC 474 may not take this course for credit.

EDUC 495 *Internship V: Upper Elementary Teaching* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 90 credits including EDUC 222, 295, 296, 297, 301, 380, 381, 382, 383, 385, 387, 388, 395, 396, 493, 494; students must be enrolled in EDUC 496 in the same term. Students are placed in an elementary classroom (Grades 4 to 6) for an eight-week student-teaching experience (200 hours). They are provided with the opportunity to continue to develop their own teaching strategies and enhance their skills in curriculum planning and implementation, preparing and evaluating classroom materials, and monitoring student progress. Students participate in the daily routines and educational duties of their co-operating teachers and become involved in student activities.

NOTE: Students who have received credit for EDUC 475 may not take this course for credit.

EDUC 496 *Upper Elementary Teaching Seminar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education Specialization; 90 credits including EDUC 295, 296, 297, 395, 396, 493, 494; students must be enrolled in EDUC 496 in the same term. The main focus of EDUC 496 is the discussion, review, and analysis of relevant material in the context of students' internship placements. Topics include curriculum development and diversity in the classroom population, involvement of parents in their children's education, Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) guidelines, teaching strategies, self-reflection and evaluation.

NOTE: Students who have received credit for EDUC 476 may not take this course for credit.

EDUC 498 *Advanced Topics in Education* (3 credits)**EDUC 499 *Advanced Topics in Education* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INFORMATION STUDIES**INST 250 *Introduction to Library Research Practices* (3 credits)**

This course is designed to introduce students to basic library research practices. It familiarizes students with a variety of information sources in both print and non-print formats. Emphasis is placed on a systematic search strategy in the use and evaluation of these information tools. Topics such as outlining and bibliographic format are covered as part of the library research process.

NOTE: Students who have received credit for EDUC 250, INSZ 250, or LIBS 250 may not take this course for credit.

LIBRARY STUDIES**LIBS 495 *Field Practice* (3 credits)**

Prerequisite: Completion of all other required Library Studies courses. In consultation with the appropriate supervising librarian, the student is placed in a local library system other than the library in which the student is employed. The duration of the field practice is five weeks. Field practice includes a wide variety of library tasks. In addition the student is required to complete a written research project on a topic approved by the professor.

31.090.1 TEACHING OF ENGLISH AS A SECOND LANGUAGE**BEd (Teaching English as a Second Language)**

The Centre for the Teaching of English as a Second Language offers the BEd degree (Teaching English as a Second Language).

Admission Requirements (BEd)

General admission requirements are listed in §13 (Admission Regulations). Specific requirements are as follows:

1. Satisfactory completion of a two-year pre-university program in a Cegep or equivalent. Within the program, the students will be required to have successfully completed the equivalent of four semester courses in English.
2. Owing to the specialized nature of this program, no more than 60 transfer credits will be permitted, and the University reserves the right to determine which ones these should be. (See §16.1.3.5.)
3. Applicants must demonstrate competence in English and French through formal tests of proficiency and obtain scores acceptable to the Department of Education.

NOTE 1: Arrangements for taking the proficiency tests may be made through the Office of the Registrar.

4. The BEd (TESL) is open to both prospective and experienced teachers and is offered in the day and evening. The internship courses are offered only as daytime, fall/winter courses.

Program

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

120 BEd Specialization in Teaching English as a Second Language

57 TESL 221³, 231³, 326⁶, 330³, 331³, 341³, 351³, 415³, 426³, 427³, 466³, 467³, 471³, 486⁶, 487⁶, 488³

15 EDUC 210⁶, 445³, 450³, 454³

15 ENGL 212³ and 213³, or 396⁶; any nine ENGL credits in English literature, of which three credits must be from Canadian Literature

6 Credits in a third language other than English or French

27 Elective credits chosen from a list approved by the Department

Certificate in the Teaching of English as a Second Language

This 30-credit program is offered to individuals whose native language is English or whose proficiency in English meets native-user standards.

Admission Requirements

1. Applicants must have completed a bachelor's degree.
2. Applicants must demonstrate competence in English through formal tests of proficiency and obtain scores acceptable to the Department of Education.

NOTE I: Arrangements for taking the proficiency tests may be made through the TESL Centre.

Concordia students may transfer into the certificate program all applicable Concordia credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. Students from other institutions may transfer up to 12 applicable credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

The TESL Certificate program is offered in the evening.

NOTE II: Individuals who have completed a prior Concordia University TESL Certificate are not eligible for admission to this certificate.

NOTE III: The Certificate in the Teaching of English as a Second Language does not satisfy the requirements for a Québec brevet d'enseignement : autorisation personnelle permanente (a teaching diploma).

Program

30	Certificate in the Teaching of English as a Second Language
6	ENGL 212 ³ and 213 ³ or 396 ⁶
24	TESL 221 ³ , 231 ³ , 324 ³ , 331 ³ , 341 ³ , 415 ³ , 424 ³ , 433 ³

Information Relevant to Programs in the Teaching of English as a Second Language

NOTE I: Upon successful completion of the BEd (TESL) program and after application to the Office of the Registrar, a graduate may be recommended to the Quebec Teachers Certification Service for a "Brevet d'enseignement : autorisation personnelle permanente" (a teaching diploma). Graduates who wish to teach ESL in francophone schools, the only schools in Quebec where ESL may be taught, must satisfy the French proficiency requirements of the school board to which they apply.

There is no comparable certification process for teaching ESL at the Cegep level — Collège d'enseignement général et professionnel (junior college) or other adult level.

To be recommended for certification, students must achieve at least a "C" grade in methodology and teaching practice courses: that is, TESL 326⁶, 330³, 331³, 426³, 427³, 466³, 467³, 471³, 486⁶, and 487⁶.

Students who obtain a passing grade that is below the level required for recommendation for certification will be placed on conditional standing within the program and will be so informed in writing by the TESL program director. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see Calendar §16.3.13.)

Students who fail to achieve the above minimum grade in two methodology/practice teaching courses (i.e. failing to achieve a grade of "C" in the same methodology/practice teaching course twice or two different methodology/practice teaching courses) will be withdrawn from the Teaching English as a Second Language Specialization program and will also be so informed in writing by the TESL program director (see Calendar §16.3.13).

Students who obtain a failing grade (F, R, or NR) in any of the courses listed above as methodology and practice teaching will be withdrawn from the program and will also be so informed in writing by the TESL program director.

In the event that a student meets regular university standards but does not satisfy the requirements for recommendation for certification, the student may apply to receive the university degree but will not be recommended to the Ministry.

Students must demonstrate proficiency in the language of instruction on an exam recognized by the MESRST prior to the start of their third internship.

NOTE II: Upon admission, students may be granted exemptions from courses in TESL programs if they have completed equivalent work at the university level.

Replacement for these exemptions must be made in accordance with the guidelines established by the Department of Education and approved by the University. Copies of these guidelines may be obtained in the Department of Education.

NOTE III: Students in the TESL Certificate must achieve at least a "C" grade in the Practicum, that is, TESL 433. Students will be allowed to repeat the course in question only once in order to achieve the required grade (see Calendar §16.3.13).

TESL Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

TESL 221 Phonology for Teachers (3 credits)

Prerequisite: TESL 231 concurrently. The aim of this course is to provide students with a knowledge of the major features of the English sound system, and to prepare them, through practical teaching assignments with ESL students, to apply this knowledge in the language classroom. Contrasts and comparisons are made with French and other languages.

TESL 231 *Modern English Grammar* (3 credits)

Prerequisite: TESL 221 concurrently. The purpose of this course is to provide students with a current description of the English grammatical system at the text level, to make them aware of grammatical differences between English and French and other major languages, and to alert them to typical grammatical errors made by non-native speakers of English.

NOTE: Students who do not achieve at least a C+ grade in TESL 231 will be placed on conditional standing within the program and will be so informed in writing by the TESL program director. Students will be allowed to repeat this course only once in order to achieve the required grade.

TESL 232 *English Grammar* (3 credits)

Prerequisite: Enrolment in Early Childhood and Elementary Education or Art Education (Visual Arts). The purpose of this course is to familiarize students with the basic concepts and terminology of grammar in general and English grammar in particular, to examine the grammatical structures of English, to provide students with a coherent framework for analyzing English grammar, and to help students identify and correct their own — and their students' errors — in written and spoken English.

NOTE: Students who have received credit for TESL 231 may not take this course for credit.

TESL 298 *Selected Topics in TESL* (3 credits)

TESL 299 *Selected Topics in TESL* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

TESL 324 *Methodology I* (3 credits)

This course reviews current theory in applied linguistics which relates directly to teaching and learning ESL in the classroom. Techniques and methods appropriate to child, adolescent, and adult learners are discussed and demonstrated. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of listening and speaking.

NOTE: Students enrolled in the BEd Specialization in Teaching English as a Second Language may not take this course for credit.

TESL 326 *TESL Pedagogy: General* (6 credits)

Prerequisite: TESL 221, 231 previously or concurrently. The purpose of this course is to introduce students to the profession of teaching English as a second language to children, adolescents, and adults. Students examine a variety of approaches and methodologies that have been used in the past and how these have contributed to current thinking and practices. They have the opportunity to observe English-language instruction in a variety of settings through visits and video presentations. They discuss issues related to lesson planning, audio-visual aids, classroom organization and management techniques. Special attention is paid to the creation of lessons appropriate to adult learners. A minimum of 30 hours is spent observing and assisting in adult ESL classes. Assignments include classroom-based projects.

TESL 330 *Computers in Language Learning* (3 credits)

Prerequisite: TESL 221, 231, 326. The purpose of this course is to introduce students to the uses of the computer in the ESL class. Students acquire knowledge of computer applications for language learning and how to incorporate this knowledge into classroom practice.

TESL 331 *Grammar for Teachers* (3 credits)

Prerequisite: TESL 231 with a grade of C+ or better. The purpose of this course is to provide students with current approaches, methods, and materials in the teaching of grammar to children, adolescents, and adults of the ESL classroom. Students will be prepared to analyze critically and modify published classroom materials related to the teaching and learning of grammar.

TESL 341 *Language Acquisition* (3 credits)

Prerequisite: TESL 221, 231 previously or concurrently; or permission of the Department. This course examines sociocultural and psycho-linguistic influences on the acquisition of a first and second language. These issues are examined in relation to the learning and teaching of a second language to children, adolescents, and adult learners.

TESL 351 *History of the English Language* (3 credits)

Prerequisite: TESL 221, 231 with a grade of C+ or better, or permission of the Department; TESL 415, 427, 467 concurrently. The purpose of this course is to provide students with an overview of the significant changes which have taken place in the English language from Proto-Indo-European to the present. Students consider the evolving nature of English and its role as an international language.

TESL 361 *Teaching English for Specific Purposes* (3 credits)

Prerequisite: TESL 324, or permission of the Department. This course provides instruction in the teaching of language skills to those who require English either as an auxiliary to their scientific, technical, or professional skills or as a medium for training in these areas.

TESL 398 *Selected Topics in TESL* (3 credits)

TESL 399 *Selected Topics in TESL* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

TESL 415 *Testing, Evaluation and Course Design* (3 credits)

Prerequisite: For BEd students: TESL 426 or 427 previously or concurrently; for certificate students: TESL 324 previously or concurrently. The purpose of this course is to prepare students to test and evaluate learners in different types of ESL programs. Students examine syllabi and evaluation systems used in the schools and in adult education settings, and become familiar with placement and proficiency testing materials.

TESL 424 *Methodology II* (3 credits)

Prerequisite: TESL 324. This course continues the presentation of techniques and methods begun in TESL 324. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of reading and writing.

NOTE: Students enrolled in the BEd Specialization in Teaching English as a Second Language may not take this course for credit.

TESL 426 *Pedagogy: Primary* (3 credits)

Prerequisite: TESL 326; TESL 330, 466, EDUC 210 previously or concurrently. The purpose of this course is to familiarize students with the principles of TESL pedagogy in regular and intensive ESL primary classrooms. This course emphasizes knowledge of MESRST primary-school programs and approved materials. Students learn classroom management techniques, assessment practices, and how to adapt materials to specific primary-school contexts.

TESL 427 *Pedagogy: Secondary* (3 credits)

Prerequisite: TESL 426, 466; TESL 467 concurrently. The purpose of this course is to familiarize students with the principles of TESL pedagogy in regular and Language Arts (ESL-LA) ESL secondary classrooms. This course emphasizes knowledge of MESRST secondary programs and approved materials. Students learn classroom management techniques, assessment practices, and how to adapt materials to specific secondary-school contexts.

TESL 433 *Practicum* (3 credits)

Prerequisite: ENGL 213; TESL 331, 341, 415, and 424 either previously or concurrently. This course is open only to students enrolled in the TESL Certificate. In this course, students practise techniques which were introduced in their methodology courses. There are opportunities for observation of ESL classes taught by experienced teachers. Techniques presented in TESL 324 and 424 are practised in micro-teaching, peer teaching, and sessions with groups of ESL students. Requirements include lesson planning and the evaluation of one's own teaching performance.

NOTE I: Students enrolled in the BEd Specialization in Teaching English as a Second Language may not take this course for credit.

NOTE II: Students in the TESL Certificate must achieve at least a "C" grade in this course. Students will be allowed to repeat this course only once in order to achieve the required grade (see Calendar §16.3.13).

TESL 466 *Internship: Primary I* (3 credits)

Prerequisite: TESL 330, 426, EDUC 210, 454 previously or concurrently. The purpose of this course is to apply the principles acquired in TESL 426 to the teaching of ESL to primary-school learners. Students attend on-campus seminars and spend a minimum of 140 hours observing and teaching in a primary school supervised by a co-operating teacher and a university professor.

TESL 467 *Internship: Secondary I* (3 credits)

Prerequisite: TESL 427 concurrently; TESL 466. The purpose of this course is to apply the principles acquired in TESL 427 to the teaching of ESL to secondary-school learners. Students attend on-campus seminars and spend a minimum of 140 hours observing and teaching in a secondary school supervised by a co-operating teacher and a university professor.

TESL 471 *Teaching Language Arts: Secondary* (3 credits)

Prerequisite: TESL 426, 466; TESL 427 previously or concurrently. The purpose of this course is to familiarize students with the principles and techniques of teaching comprehension and production skills to advanced secondary learners of ESL. Students are made familiar with current approaches to the teaching of high-level oral interaction skills, reading and writing skills, corrective feedback to writing, and the use of long-term projects and portfolios. The use of authentic English texts such as essays, novels, short stories, poetry, and drama is emphasized.

NOTE: Students who have received credit for TESL 318 or for this topic under a TESL 498 number may not take this course for credit.

TESL 486 *Internship: Primary II* (6 credits)

Prerequisite: ENGL 212, 213 with a grade of C+ or better; EDUC 200, 450, 454; TESL 330, 331, 341, 415, 426, 466, 471; TESL 487, 488 concurrently. Students must also have completed at least six of the required nine credits in English Literature. The purpose of this course is to further develop the skills required in teaching ESL to primary-school learners. Students teach a minimum of 210 hours supervised by a co-operating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 487 *Internship: Secondary II* (6 credits)

Prerequisite: EDUC 200; TESL 467; TESL 486, 488 concurrently. The purpose of this course is to further develop the skills required in teaching ESL to secondary-school learners. Students teach a minimum of 210 hours supervised by a co-operating teacher and a university professor. In addition, students attend on-campus seminars in which they discuss and reflect upon their experiences in the schools.

TESL 488 *Internship Seminar* (3 credits)

Prerequisite: TESL 486, 487 concurrently. The purpose of this course is to integrate the knowledge gained during the BEd with the knowledge that students have acquired during practice in the field. Students reflect on and make explicit their own professional and personal development over the course of the four-year program and set goals for future long-term professional development.

TESL 491 *Study in a Special Subject* (3 credits)

Prerequisite: Permission of the Department. This course provides an opportunity for advanced students to intensify their study beyond the area of specialization already represented by the curriculum. The selected subject varies with the special interest of the instructor conducting the course in any given year.

TESL 492 *Study in a Special Subject* (3 credits)

Prerequisite: Permission of the Department. A student repeating TESL 491 registers for credits under TESL 492.

TESL 498 *Advanced Topics in TESL* (3 credits)

TESL 499 *Advanced Topics in TESL* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Courses in English as a Second Language — ESL Courses

Courses in English as a Second Language are designed for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Students must be tested for placement in ESL 202 or 204 and 205 or 206. Information about placement testing schedules may be obtained from the English Language Proficiency Testing Office of the Department of Education, 2070 Mackay, Room: 200, 514-848-2424, ext. 2453. A special examination fee is charged. (See concordia.ca/admissions/tuition-and-fees)

Written work is required in English for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

NOTE: Students enrolled in a regular degree or an Extended Credit degree program in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.

ESL 202 *Developing Academic English Language Skills* (6 credits)

Prerequisite: Placement by the Concordia Comprehensive ESL Placement Test (ConCEPT). This course helps non-native-speaking students develop the language skills necessary for academic work through an integrated program of grammar, vocabulary, reading, and writing. The coursework enables students to build a wide range of vocabulary and grammatical structures and apply them to essential university tasks such as paraphrasing, expository writing, and processing academic texts.

ESL 204 *Refining Academic English Language Skills* (6 credits)

Prerequisite: ESL 202 or placement by the Concordia Comprehensive ESL Placement Test (ConCEPT). This course helps non-native-speaking students strengthen their English language skills and apply them to high-level academic tasks such as critical reading, synthesizing, and integrated writing assignments. Attention is paid to analyzing patterns in written English and making appropriate language choices as well as identifying, integrating, and referencing appropriate academic source material.

ESL 205 *Academic Oral Communication I* (3 credits)

Prerequisite: Placement by the Concordia Comprehensive ESL Placement Test (ConCEPT). This course helps students develop the oral skills necessary for speaking and listening in an English-speaking academic environment. The focus of the course is the improvement of students' overall pronunciation skills, including native-like production of English speech at the level of individual sounds, words, and sentences, as well as the development of the listening skills necessary for effective oral communication. This course includes a multimedia language lab component.

ESL 206 *Academic Oral Communication II* (3 credits)

Prerequisite: ESL 205 or placement by the Concordia Comprehensive ESL Placement Test (ConCEPT). This course helps students achieve greater intelligibility and fluency by practising oral communication skills in meaningful discourse, as part of communicative activities and public-speaking assignments. Emphasis is placed on the learning of speech phenomena at the discourse level such as production of native-like stress, rhythm, intonation, and speaking rate. This course includes a multimedia language lab component.

ESL 298 *Selected Topics in ESL* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.090.2 ADULT EDUCATION

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

30 Certificate in Adult Education

Certificate Admission Requirements

General admission requirements are listed in §13. Applicants will be interviewed prior to admission.

Students must take:

- 9 ADED 201³, 202³, 220³
- 12 Chosen from the Adult Education (ADED) offerings
- 3 Chosen from cognate courses with the permission of the program director
- 6 ADED 496³, 497³, Integrative Internships I and II

Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

24 Minor in Adult Education

- 9 ADED 201³, 202³, 220³
- 15 Chosen from Adult Education (ADED) course offerings with the prior approval of the Adult Education advisor.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ADED 201 Concepts and Principles of Adult Education (3 credits)

This course consists of an overview of the field of adult education as a field of study with emphasis given to its philosophy, objectives, historical development, and the nature of adult learners. It also examines adult education as a field of practice with emphasis given to methods, techniques, roles, and competencies. This course stresses active student participation and self-directedness.

NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 202 The Scope and Nature of Adult Education Programs (3 credits)

This course is designed to help students develop an understanding of the scope and nature of adult education programs. Emphasis is placed on existing programs, and institutions and agencies providing them. The course stresses active student participation and self-directedness.

NOTE: Students who have received credit for ADED 200 may not take this course for credit.

ADED 220 Adults as Learners (3 credits)

This course examines the unique physiological, psychological, and sociological characteristics of adults, their influence on adult learning and development, and their implications for educational intervention. Attention is given to changes which occur at various stages of the adult life cycle, and particularly to the dimensions which affect the adult's self-concept and orientation to learning, the motivations, needs, and interests which cause adults to participate in educational activities.

ADED 230 Roles and Competencies of Adult Educators (3 credits)

The purpose of this course is to review the state of professionalization of adult education. General skills, knowledge, and attitudes expected of adult educators regardless of the setting in which they work are examined. In addition, according to the participants' needs and interests, an opportunity is given to explore competencies related to the particular roles of, e.g., administrators, program developers, trainers, leaders, instructors, counsellors, and volunteer workers.

ADED 240 Introduction to Research in Adult Education (3 credits)

This course is designed to introduce students to how to gain access to and utilize major information sources in adult education. In addition, the course examines research interests and problem areas studied in adult education and related fields, along with current trends and various methods of inquiry used.

ADED 298 Selected Topics in Adult Education (3 credits)

ADED 299 Selected Topics in Adult Education (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 302 Group Dynamics (3 credits)

This course examines the processes, conditions, and skills involved when adults work in groups. Participants develop a knowledge and understanding of group dynamics and acquire the skills needed for using groups as a means of adult learning. One of the approaches this course takes is to have participants learn about group dynamics by being actively involved in various interactive group situations.

NOTE: Students who have received credit for this topic under ADED 370 may not take this course for credit.

ADED 333 *Methods and Techniques for Facilitating Adult Learning* (3 credits)

This course is designed to give adult educators an opportunity to practise and improve their skills in facilitating adult learning. Different models of educational processes and optimal conditions for promoting adult learning are examined; attention is given to case studies, role plays, and simulation methods and techniques, as well as to individualized learning formats.

NOTE: Students who have received credit for ADED 330 or 331 may not take this course for credit.

ADED 344 *Design of Adult Learning Projects* (3 credits)

The purpose of this course is to assist participants in developing a clear working concept of various models for planning and designing adult learning projects. To facilitate this understanding, the different steps of the process are closely examined and discussed. Participants are given an opportunity to design and conduct a learning activity in the area of subject matter speciality. A systems approach, including methods for evaluating the design of the learning project is emphasized.

NOTE: Students who have received credit for ADED 340 or 341 or 343 may not take this course for credit.

ADED 345 *Evaluating Adult Learning Projects* (3 credits)

The purpose of this course is to assist participants in developing a clear working concept of various models for assessing the effectiveness of adult learning projects. The course emphasizes a systematic approach to evaluation, techniques for collecting information and providing feedback to program operation and impact. Participants are given the opportunity to conduct an evaluation of an adult learning project in the area of subject matter speciality.

NOTE: Students who have received credit for ADED 342 or 343 may not take this course for credit.

ADED 370 *Workshops for Adult Educators* (3 credits)

These workshops examine a number of topics and problems related to the field of adult education. The issues considered may differ from year to year and will be stated in the Undergraduate Class Schedule. The workshop format is designed to provide adult educators with learning opportunities that are flexibly scheduled or in the form of a one-week intensive seminar.

ADED 398 *Selected Topics in Adult Education* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ADED 403 *Diversity in Adults* (3 credits)

It is the role of adult educators (agents of change) to confront issues of diversity and to challenge the forces of racism, sexism, classism, homophobia, and discrimination. By integrating notions of education, and by reflecting on the roles of practitioners, this course develops strategies to resist structural inequality and oppression.

NOTE: Students who have received credit for this topic under an ADED 498 number may not take this course for credit.

ADED 410 *Adult Education in Canada and Quebec* (3 credits)

The purpose of this course is to examine the historical development and current state of adult education in Canada, with special reference to Quebec. Various factors which influenced the development of adult education in our society are explored; the focus is on present status, role and structure, and socio-cultural and philosophical underpinnings of the field.

ADED 412 *Concepts and Values in Adult Education* (3 credits)

This seminar is designed to encourage adult educators to reflect upon and question what one is engaged in and why. A selection of conceptual and philosophical issues underlying adult educational practice is critically examined and discussed. Attention is given to the meaning of words, the nature of ideas and values, the implications of assumptions and principles which are deemed specific in the sphere of the education of adults.

ADED 440 *Issues in the Practice of Adult Education* (3 credits)

The purpose of this seminar is to study and discuss current issues relating to the field and profession of adult education in general, along with more specific and local concerns. Group and individual interests have an important bearing on the design of this course.

ADED 496 *Integrative Internship I* (3 credits)

Prerequisite: ADED 201; ADED 202 and 15 credits in the program. This internship is designed to assist individual students in achieving a synthesis of their own experiential learning in light of acquired knowledge, skills, values, and attitudes through the clarification of personal aims and the philosophy of adult education. Students will normally enrol in this internship near the end of their program.

NOTE: Students who have received credit for ADED 495 may not take this course for credit.

NOTE: Students will normally enrol in ADED 496 near the end of their program.

ADED 497 *Integrative Internship II* (3 credits)

Prerequisite: Successful completion of ADED 496. This internship is designed to extend the personal aims and philosophy of adult education arrived at in Integrative Internship I, and engage in a special project in an adult education facility where supervision is provided by the host institution.

NOTE: Students who have received credit for ADED 495 may not take this course for credit.

ADED 498 *Advanced Topics in Adult Education* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.100

ENGLISH

Faculty

Chair

JILL DIDUR, PhD York (Can.), Associate Professor

Distinguished Professors Emeriti

HENRY BEISSEL, PhD Cologne

HOWARD FINK, MA McG.

EDWARD PECHTER, PhD Calif. (Berkeley)

Professors

MARY DI MICHELE, MA Windsor

MARCIE FRANK, PhD Johns H.

BINA FREIWALD, PhD McG.

JUDITH S. HERZ, PhD Roch.

JOSIP NOVAKOVICH, MPhil Yale, MA Texas

ALAN SHEPARD, PhD Virginia

Associate Professors

STEPHANIE BOLSTER, MFA Br.Col.

TERENCE BYRNES, MA C'dia.

JASON CAMLOT, PhD Stan.

MARY ESTEVE, PhD Wash.

MEREDITH EVANS, PhD Johns H.

ANDRE FURLANI, PhD Tor.

LAURA GROENING, PhD Car.

MIKHAIL IOSSEL, MSc Leningrad, MA New Hamp.

PATRICK LEROUX, PhD Paris III

OMRI MOSES, PhD Calif. (Berkeley)

NICOLA NIXON, PhD Tor.

DANIEL O'LEARY, PhD Br.Col.

KEVIN PASK, PhD Johns H.

JONATHAN SACHS, PhD Chic.

MANISH SHARMA, PhD Camb.

KATE STERNS, MA Johns H., MFA Texas (Austin)

Assistant Professors

DANIELLE BOBKER, PhD Rutgers

JOHN MILLER, PhD McM.

RITVA SEPPANEN, MA C'dia.

DARREN WERSHLER, PhD York (Can.)

STEPHEN YEAGER, PhD Tor.

Lecturer

SINA QUEYRAS, MA C'dia.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

J.W. McConnell Building, Room: LB 641

514-848-2424, ext. 2340

Department Objectives

The Department of English offers studies in literature, creative writing, and composition. Literary studies encourage appreciation and critical analysis of texts in their historical, literary, and cultural contexts. The Creative Writing program allows students to learn the craft involved in the production of original literary work. Professional Writing courses develop writing skills for use in business, technical, and other professional environments. Composition courses help to develop writing skills from basic to advanced levels.

Admission Requirements

TOEFL iBT REQUIREMENT

In order to be considered for admission to any of the programs offered by the Department of English, International applicants whose first language is not English must submit a recent TOEFL iBT score of 100 or higher with a minimum of 22 on the writing section. These tests must have been written within the past 24 months.

ADMISSION REQUIREMENTS FOR CREATIVE WRITING COURSES AND PROGRAMS

Creative Writing programs (Major, Minor, Honours in English and Creative Writing) are designed to develop the literary skills of students with a commitment to writing as an art form. Structured workshops guide students through the practice of their craft from introductory to advanced levels under the supervision of experienced writers. Enrolment is limited to permit constructive analysis of a student's work.

Admission to the Creative Writing programs and courses requires approval of a creative portfolio and a letter of intent. Students wishing to enter any introductory genre course in Creative Writing (225, 226, 227) or the Creative Writing programs (Major, Minor, Honours in English and Creative Writing) must apply by submitting a letter of intent and a portfolio consisting of a maximum of 15 pages of their best writing in poetry, drama, and/or fiction (short stories or novel excerpts). For students applying to the Creative Writing programs, submission in more than one genre is required.

Portfolios and letters of intent must be submitted **directly** to the English Department office. Application deadlines for students new to Concordia or in Concordia degree programs other than the BA are November 1 (for January admission) and March 1 (for September admission). Applications in these cases will be received as early as September and January, respectively. For students currently in a BA program in another discipline, the portfolio and letter of intent must be submitted by June 1 for courses starting in September and by November 7 for courses starting in January. Since student demand regularly outpaces enrolment capacity, early application is advisable in all cases.

For further details on, and updates to, admission procedures, please consult the Department of English website.

Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).

REQUIREMENTS FOR ENGLISH LITERATURE PROGRAMS

All students entering the English Literature Major must take a special composition placement test which includes a literary component. Depending on the results of the test, students will be placed according to their levels in, initially, one of ENGL 206, ENGL 207, or ENGL 212. (Some sections of ENGL 212 are specially designated for English majors.) ENGL 212 and ENGL 213 do not count towards an English Literature or Creative Writing program, but may be claimed as general electives. The composition requirement must be satisfied in the first year of enrolment in the program. Students should note the required introductory courses in each of the programs.

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in English Literature

3 ENGL 260³

6 ENGL 261³, 262³

NOTE: The above nine credits to be taken within first 24 credits

18 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 305³, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 326³, 327³, 328³, 331³, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 329⁶, 331³, 332³, 333³, 334³, 335⁶, 441³, 442³, 443³

15 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Modern and contemporary from ENGL 303⁶, 336³ through 359³, 446³

2) American from ENGL 360⁶ through 369³, 380³, 381³, 449³, 450³, 455³

3) Canadian from ENGL 244³, 370⁶, 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

4) Postcolonial from ENGL 382³, 383³, 385³, 386³, 387³, 388³, 454³

3 Literary Theory or History of Criticism chosen from ENGL 389³, 390³, 391³, 392³, 393³, 394³, 444³, 447³

3 ENGL 470³

12 Elective credits from ENGL 224³ through 499⁶

NOTE: Honours students must take at least nine credits at the 400 level, including ENGL 470. However, a student, in consultation with the honours-majors advisor may substitute another 400-level course for ENGL 470.

60 BA Specialization in English Literature

3 ENGL 260³

6 ENGL 261³, 262³

NOTE: The above nine credits to be taken within first 24 credits

15 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Early, medieval, and 16th century from ENGL 302³, 304⁶, 305³, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 326³, 327³, 328³, 331³, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 329⁶, 331³, 332³, 333³, 334³, 335⁶, 441³, 442³, 443³

18 Chosen from the following four groups; at least three credits must be taken from each group. A course can only be counted in one group, even if it is listed in more than one.

1) Modern and contemporary from ENGL 303⁶, 336³ through 359³, 393³, 394³, 446³

2) American from ENGL 360⁶ through 369³, 380³, 381³, 449³, 450³, 455³

3) Canadian from ENGL 244³, 370⁶, 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

4) Postcolonial from ENGL 382³, 383³, 385³, 386³, 387³, 388³, 454³

18 Elective credits from ENGL 224³ through 499⁶

42 BA Major in English Literature

3 ENGL 260³

6 ENGL 261³, 262³

NOTE: The above nine credits to be taken within first 24 credits

6 Chosen from ENGL 303⁶, 337⁶ through 388³

6 Chosen from ENGL 302³ through 394³, 398³, 399⁶, 430⁶ through 499⁶

6 Chosen from ENGL 302³ through 499⁶

15 Elective credits from ENGL 224³ through 480³, with at least three credits at the 300 or 400 level

66 BA Honours in English and Creative Writing

3 ENGL 260³

12 Chosen from ENGL 225⁶, 226⁶, 227⁶

6 ENGL 261³, 262³

15 Chosen from the following four groups. Students must take at least three credits in three of the groups. A course may count in only one group, even if it is listed in more than one.

1) Early, medieval and 16th century from ENGL 302³, 304⁶, 305³, 310³, 316³, 430⁶, 432⁶, 434³

2) 17th century from ENGL 311³, 318³, 319³, 320⁶, 435³, 436³, 437³

3) 18th century from ENGL 321³, 322³, 323³, 324⁶, 326³, 327³, 328³, 438³, 439³, 440³, 441³

4) 19th century from ENGL 324⁶, 329⁶, 331³, 332³, 333³, 334³, 335⁶, 441³, 442³, 443³

6 Chosen from ENGL 425⁶, 426⁶, 427⁶

6 Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶, 425⁶, 426⁶, 427⁶, 428⁶, 429³, 486³

6 Modern and contemporary, American and postcolonial from ENGL 303⁶, 336³ through 369³, 380³ through 388³, 393³, 394³, 446³, 449³, 450³, 454³, 455³

3 Canadian from ENGL 244³, 370⁶, 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

9 Elective credits in English literature

At least three credits of course work in English literature must be at the 400 level; these three credits can coincide with fulfilling any of the other requirements.

42 BA Major in Creative Writing*

12 Chosen from ENGL 225⁶, 226⁶, 227⁶

6 Chosen from ENGL 425⁶, 426⁶, 427⁶

6 Chosen from ENGL 410⁶, 411⁶, 412⁶, 413⁶, 425⁶, 426⁶, 427⁶, 428⁶, 429³, 486³

6 Credits in Canadian literature from ENGL 244³, 370⁶, 373³, 374³, 376³, 377³, 378³, 379³, 380³, 451³, 452³, 453³

12 ENGL elective credits in literature courses

**NOTE: Students wishing to register for the Major in Creative Writing should refer to the admission requirements for Creative Writing courses and programs.*

24 Minor in Creative Writing

12 Chosen from ENGL 225⁶, 226⁶, 227⁶

6 Chosen from ENGL 425⁶, 426⁶, 427⁶

6 ENGL elective credits in literature courses

Students wishing to register for the Minor in Creative Writing should refer to the admission requirements for Creative Writing courses and programs.

24 Minor in English Literature

3 ENGL 260³

21 ENGL elective credits in literature courses*

**Students are encouraged to consult with the Department in selecting their courses.*

24 Minor in Professional Writing

- 12 ENGL 213³, 214³, 215³, 216³
- 6 ENGL 396⁶
- 3 Chosen from ENGL 395³, 397³
- 3 Chosen from ENGL 233³, 390³, 395³, 397³

**Students are encouraged to consult with the Department in selecting their courses.*

60 BA Joint Specialization in English and History

- 6 ENGL 261³, 262³
- 6 Periods before 1800 (British) from ENGL 302⁶, 304⁶ through 328³, 430³ through 441³
- 6 Canadian, American, and postcolonial from ENGL 244³, 360⁶ through 388³, 449³ through 455³
- 6 19th century and 20th century (British and European) from ENGL 324⁶, 331³ through 359³, 394³, 442³, 443³, 446³
- 6 Elective credits from ENGL 224³ through 499³
- 6 History of Europe (HIST 201³, 202³)
- 9 HIST 200-level courses
- 9 HIST 300-level courses
- 6 HIST 300- or 400-level courses

Courses

200-level courses and 300-level courses without prerequisite are open to all students and may be used as English electives unless otherwise indicated.

These courses may require students to submit all written work in English only. Please consult the Department.

Not all courses listed here are offered in a given year. The Department will make an effort to offer the 200- and 300-level courses that are required for specific programs on a regular basis. General electives (230-254) and courses at the 400 level will be offered on a rotating basis. Students should consult the Concordia University web page and follow the links to the Department of English.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ENGL 206 Fundamentals of Written English – Stage I (3 credits)

Prerequisite: ESL 204 or placement test. This course provides training in grammar and idiomatic usage, through practice with articles and plurals, verb forms and tenses, prepositions and verb-preposition combinations, sentence structure, and punctuation, as well as reading comprehension and vocabulary development through practice in paraphrasing short texts.

NOTE 1: This course does not count for credit within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course for credit.

ENGL 207 Fundamentals of Written English – Stage II (3 credits)

Prerequisite: ENGL 206 or placement test. This course continues the work begun in ENGL 206 by providing additional training and practice in grammar and idiomatic usage, sentence structure and punctuation, as well as vocabulary development and reading comprehension through practice in paraphrasing and summarizing.

NOTE 1: This course does not count for credit within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 208 Introduction to English Composition and Literary Analysis (3 credits)

Prerequisite: Placement test. This course is intended for students who wish to improve their writing skills through written analysis of fiction, drama, and literary essays.

NOTE 1: This course does not count for credit within any English Literature, Creative Writing, or Professional Writing program.

NOTE 2: Students who have received credit for this course may not subsequently take any ESL course for credit.

ENGL 210 Introduction to Essay Writing (3 credits)

Prerequisite: ENGL 207 or placement test. The course provides further practice in English composition by focusing on diction, sentence structure, punctuation, paragraph development, and essay writing.

NOTE 1: This course does not count for credit within any English program.

NOTE 2: Students who have received credit for this course may not subsequently take ENGL 206 or 207 for credit.

ENGL 212 English Composition — Stage I (3 credits)

Prerequisite: ENGL 210 or placement test. This course is intended to help students produce clear, concise, logically organized essays and reports. Emphasis is placed on purpose, organization, and development through analysis and integration of information from a variety of sources.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or English course earlier in the composition sequence for credit.

ENGL 213 English Composition — Stage II (3 credits)

Prerequisite: ENGL 212 or placement test. This course develops further the writing skills acquired in ENGL 212 by familiarizing students with the processes and techniques necessary for the preparation of research papers and academic reports. Emphasis is

placed on summarizing and paraphrasing, critiquing ideas and information, and synthesizing, citing, and documenting multiple sources. A library orientation is a required part of this course.

NOTE 1: Students who have received credit for this course may not subsequently take ENGL 206, 207, 210, or 212 for credit.

NOTE 2: The composition sequence also includes ENGL 396, Advanced Composition and Professional Writing.

ENGL 214 Grammar, Usage, and Style (3 credits)

Prerequisite: ENGL 212. This course offers a practical analysis of the conventions governing contemporary English grammar and usage, punctuation, sentence structure, and syntax. It focuses on means for identifying and analyzing stylistic effectiveness and persuasive power in diverse professional situations.

NOTE: Students who have received credit for this course may not subsequently take any ESL course or ENGL 206–212 for credit.

ENGL 215 Principles and Practice of Editing (3 credits)

Prerequisite: ENGL 214 previously or concurrently. This course includes basic copy editing and techniques for eliminating errors in style, mechanics, and facts, and substantive editing for identifying structural problems and reorganizing, reworking, and rewriting documents.

NOTE: Students who have received credit for this course may not subsequently take ENGL 206, 207, 210, 212, or 213 for credit.

ENGL 216 Writing for Diverse Audiences (3 credits)

Prerequisite: ENGL 213 previously or concurrently. This course examines the ways that information is presented to different audiences through writing and the interaction of texts and images. Assignments include analysis of informational and persuasive strategies in model discourses for form, content, style, and design, and the application of such techniques to developing and producing documents.

NOTE: Students who have received credit for this course may not subsequently take ENGL 206, 207, 212, 213 for credit.

ENGL 224 The Creative Process (3 credits)

This course introduces students to some options for developing their own process of literary creation, from the development of an idea through to the writing and editing of works of prose fiction, poetry, and/or drama. Course work may include writing assignments, in-class exercises, readings, group presentations, and discussions. This course is open to all students.

NOTE: Students who have received credit for ENGL 224 may not take this course for credit.

ENGL 225 Creative Writing: Poetry (6 credits)

This is an introductory workshop in the writing of poetry. The first half of the course is an introduction to poetic forms and techniques. Required readings of poetry and critical essays, and exercises and assignments based on these readings, develop a common critical language and an understanding of poetry from a writer's point of view. This knowledge is applied during the second half of the course, during which the class is conducted as a writing workshop. Students submit their original work for class discussion and evaluation.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 226 Creative Writing: Prose Fiction (6 credits)

This is an introductory workshop in the writing of prose fiction. The first half of the course is an introduction to prose forms and techniques. Required readings of fiction and critical essays, and exercises and assignments based on these readings, develop a common critical language and an understanding of fiction from a writer's point of view. This knowledge is applied during the second half of the course, during which the class is conducted as a writing workshop. Students submit their original work for class discussion and evaluation.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 227 Creative Writing: Drama (6 credits)

This is an introductory workshop in the writing of plays. The first half of the course is an introduction to dramatic forms and techniques. Required readings of drama and critical essays, and exercises and assignments based on these readings, develop a common critical language and an understanding of drama from a writer's point of view. This knowledge is applied during the second half of the course, during which the class is conducted as a writing workshop. Students submit their original work for class discussion and evaluation.

NOTE: Students wishing to register for ENGL 225, 226, or 227, should refer to admission requirements for Creative Writing.

ENGL 231 Medieval Literature in Translation (3 credits)

This course studies influential texts in the Western tradition written between 400 and 1500, with emphasis on the innovations in the various genres of narrative (epic, saga, romance, tale) and erotic and ethical discourse. Texts by such writers as Marie de France, Chrétien de Troyes, Dante, and Petrarch, may be studied, as well as anonymous works such as Icelandic sagas and *The Song of Roland*.

ENGL 233 Critical Reading (3 credits)

This course is an introduction to the practice of close reading of selections chosen from poetry, fiction, drama, and non-literary prose with the aim of developing the skills necessary to respond to written texts.

ENGL 234 Poetry (3 credits)

Through a detailed examination of the various forms of poetry, this course is designed to familiarize students with the vocabulary and critical and technical concepts of the genre.

ENGL 235 *Short Fiction* (3 credits)

Through a detailed examination of the various forms of short fiction and the novella, this course is designed to familiarize students with the vocabulary, critical concepts, and history of the genre.

NOTE: Students who have received credit for ENGL 235N may not take this course for credit.

ENGL 237 *Tragedy* (3 credits)

This course is an introduction to the nature and varieties of tragic forms and sensibilities in Western literature. The course includes writers from antiquity to the present such as Sophocles, Euripides, Shakespeare, Behn, Racine, Hardy, Ibsen, Lorca, and Chopin.

ENGL 238 *Comedy* (3 credits)

This course is an introduction to the nature and varieties of comic forms and sensibilities in Western literature. The course includes writers from antiquity to the present such as Aristophanes, Cervantes, Jonson, Molière, Sterne, Gogol, Wilde, Leacock, and Amis.

ENGL 240 *Drama* (3 credits)

This course is an introduction to dramatic literature, principally in the Western tradition, and is designed to familiarize students with a selection of major works in this genre. Plays include ancient Greek dramas and works written for the stage by such writers as Aeschylus, Sophocles, Aristophanes, Shakespeare, Calderón, Webster, Racine, Molière, Büchner, Chekhov, Ibsen, Beckett, Handke, Stoppard, and Soyinka.

ENGL 241 *The Novel* (3 credits)

This course is an introduction to the varieties of novelistic forms in world literature. It familiarizes students with critical approaches to the novel and the history of the novel as a literary genre.

ENGL 243 *Satire* (3 credits)

This course is an introduction to the nature, varieties, and functions of satire, including writers from antiquity to the present, such as Juvenal, Horace, Erasmus, Swift, Voltaire, Byron, Butler, Orwell, Waugh, Spark, Richler, Vonnegut, and Atwood.

ENGL 244 *Quebec/Montreal Writing in English* (3 credits)

This course surveys the literature of Quebec written in English, with emphasis on Montreal writing. It includes such writers as F.R. Scott, MacLennan, Klein, Dudek, Layton, Symons, Gallant, Richler, Cohen, Allen, Anderson, Glassco, and Mouré.

ENGL 246 *Science Fiction* (3 credits)

This introductory course explores the development of science fiction from Mary Shelley to H.G. Wells to the present day. Along with works by such authors as Huxley, Clarke, Dick, Delany, Le Guin, Atwood, or Gibson, translated works by such authors as Verne, Zamyatin, and Lem may be studied.

NOTE: Students who have received credit for ENGL 246N may not take this course for credit.

ENGL 249 *Children's Literature* (3 credits)

As an introductory survey of children's literature, this course includes works written primarily for adults but traditionally also read by children, works specifically written for children, as well as fairy tales and other versions of folklore and myth written or adapted for children.

ENGL 250 *Forms of Popular Writing* (3 credits)

The topic of this course varies from year to year. It investigates such forms as spy novel, detective fiction, mystery, romance, travel writing, horror, and erotica in the context of the conventions, history, and popular appeal of the genre under discussion.

ENGL 251 *The Graphic Novel* (3 credits)

This course examines both literary and popular antecedents to the graphic novel, the variety of its forms, and its status in contemporary literature. Students are introduced to critical approaches that can take account of both verbal and visual aspects of the graphic novel.

NOTE: Students who have received credit for this topic under an ENGL 398 number may not take this course for credit.

ENGL 260 *Introduction to Literary Study* (3 credits)

This course introduces students to the practice of literary criticism at the university level through reading and writing about a variety of literary texts while developing the tools to analyze them in a close and critical fashion. This entails attention to the fundamentals and varieties of literary criticism — genre, rhetorical and figurative language, and narrative structure — as well as some attention to the role of theory in literary study.

ENGL 261 *British Literature to 1660* (3 credits)

Starting with selected Old English texts in translation, the course examines the literary production of the medieval period and the 15th to 17th centuries in Britain. Works are studied in their social and historical contexts and, where possible, in relation to the other arts. The course may discuss *Beowulf*, Chaucer, Julian of Norwich, medieval drama, Malory, Skelton, Wyatt, Spenser, the Sidneys, Shakespeare, Webster, Donne, Lanyer, Burton, Browne, and Milton.

NOTE: Students who have received credit for ENGL 230 may not take this course for credit.

ENGL 262 *British Literature from 1660 to 1900* (3 credits)

Prerequisite: ENGL 261 recommended. This course surveys literature written in Britain from the period following the Civil War and Commonwealth to the end of the Victorian era, periods traditionally labelled Neo-Classical, Romantic, and Victorian. The course considers such issues and forms as epic, mock-epic, satire, the development of the novel, the comedy of manners, the rise of the professional writer, the romantic lyric, the increasing activity of women writers, the origins of modernism, and the interrelations among the periods.

NOTE: Students who have received credit for ENGL 230 may not take this course for credit.

ENGL 298 *Selected Topics in English* (3 credits)

ENGL 299 *Selected Topics in English* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 302 *History of the English Language* (3 credits)

This course examines changes in the English language from the Anglo-Saxon era to the present, considering such matters as pronunciation, inflections, syntax, vocabulary, and social distribution.

ENGL 303 *Reading Women Writing* (6 credits)

This course offers an historical and theoretical perspective on writings by women from different periods, cultural contexts, and expressive forms. A close reading of selected novels, short stories, plays, and of polemical, poetic, and autobiographical works raises such issues as class, race, and gender; sexuality and creativity; national, collective, and individual identity; literary and political strategies of resistance; the use, transformation and subversion of literary forms; the popular and critical reception of individual works.

ENGL 304 *Chaucer* (6 credits)

This course studies major texts of Geoffrey Chaucer with emphasis on *Troilus and Criseyde* and *Canterbury Tales* in terms of the social, literary, and historical issues opened by these texts.

ENGL 305 *Studies in Medieval English Literature* (3 credits)

This course examines selected subjects in the history of Old English and Middle English literature. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 310 *16th-Century Prose and Poetry* (3 credits)

This course investigates developments in non-dramatic literature from the late-15th century to the 1590s, through an examination of representative poems and prose works in their historical and cultural contexts. The course includes such writers as Skelton, Wyatt, Nashe, Spenser, Sidney, and Shakespeare.

ENGL 311 *17th-Century Prose and Poetry* (3 credits)

This course examines the development of prose and lyric poetry from the 1590s through the Civil War and Commonwealth periods. It considers such issues as genre, form, the representation of subjectivity and gender, the function of patronage, and the shift to a print culture. The course includes such writers as Mary Sidney, Jonson, Lanyer, Donne, Browne, Walton, Herbert, Wroth, and Marvell.

NOTE: Students who have received credit for ENGL 311N may not take this course for credit.

ENGL 316 *Spenser* (3 credits)

This course examines Spenser's works, especially *The Faerie Queene*, in relation to such topics as genre, literary tradition, and historical and cultural contexts.

ENGL 318 *English Renaissance Drama* (3 credits)

This course studies plays written in the period from the start of the English commercial theatre in 1576 until its closing in 1642, in terms of the development of dramatic forms, court and popular culture, and social history. The course includes such writers as Kyd, Marlowe, Middleton, Jonson, Cary, Webster, and Ford.

NOTE: Students who have received credit for ENGL 318N may not take this course for credit.

ENGL 319 *Milton* (3 credits)

This course examines *Paradise Lost* and selections from Milton's early poetry, especially *Lycidas*, in the contexts of 17th-century writing, politics, and religion.

ENGL 320 *Shakespeare* (6 credits)

This course examines a range of Shakespearean texts in relation to such matters as dramatic and theatrical conventions, social history, poetic language, high and popular culture, critical history, and influence.

ENGL 321 *Restoration and Early 18th-Century Literature* (3 credits)

This course studies British literature from 1660, when the monarchy was returned to power, to 1730, when the court no longer dominated British literary culture. The course examines the wide range of genres introduced or transformed by the period's restless literary imagination, including the novel, satire, the letter, and the essay. It situates these developments in the context of changing ideas of status, gender, sexuality, science, politics, and economics.

ENGL 322 *Restoration and 18th-Century Drama* (3 credits)

This course examines the changing role of theatre in English culture after the re-opening of the theatres in 1660 to the middle years of the 18th century: from aristocratic heroism and libertine scandals to increasingly middle-class pleasures. It focuses on the transformation of dramatic conventions in such forms as the comedy of manners and sentimental tragedy and familiarizes students with the history of performance in the period, including the introduction of actresses and the codification of new acting styles.

ENGL 323 *The Literature of Sensibility* (3 credits)

This course examines the structure and nature of feeling in British literature of the mid- and late-18th century along with some consideration of concurrent developments in philosophy, historical and critical writing, and biography. It explores the contributions of concepts of sensibility and sympathy to aesthetic innovations such as realism, pornography, the gothic, and the sublime, and political developments such as feminism, abolitionism, and an emergent discourse of human rights.

ENGL 324 *The 18th- and 19th-Century Novel* (6 credits)

This course surveys developments in the British novel from its origins in documentary realism, satire, and romance, including the gothic, to the emergence of the novel as a dominant literary genre. The course includes works by such writers as Defoe, Fielding, Sterne, Radcliffe, Burney, Edgeworth, Austen, Dickens, the Brontës, Eliot, and Hardy.

ENGL 326 *Studies in 18th-Century British Literature* (3 credits)

This course examines selected subjects in the history of 18th-century British literature. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 327 *Restoration and 18th-Century Satire* (3 credits)

This course examines the development of satirical poetry, prose, and drama in the Restoration and 18th century. It explores formal issues such as satire's debts and contributions to pastoral, georgic, epic, comedy and the novel alongside such social, political, and intellectual concerns as the battle of the ancients and the moderns, libel, sedition, and copyright law, the rise of party politics, and changing gender roles. Writers may include Marvell, Rochester, Dryden, Swift, Pope, Manley, Gay, Fielding, and Sterne.

ENGL 328 *The Rise of the Novel* (3 credits)

This course examines the emergence and evolution of the novel and novel criticism from their beginnings in the 1680s until the end of the 18th century. It explores the reciprocal pressures of romance and realism in the formation of the novel in order to consider the ethical and aesthetic issues raised by this popular genre as well as the influences of other genres such as journalism, letters, diaries, and travel writing.

ENGL 329 *Literature of the Romantic Period* (6 credits)

This course examines the prose and poetry of the Romantic period (ca. 1790 to 1830s) in relation to such topics as the French Revolution, the Napoleonic wars, domestic politics, literary conventions, and the idea of the poet. Among the poets to be considered are Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Some attention may be given to such writers as Dorothy Wordsworth, De Quincey, Hazlitt, the Lambs, Austen, Scott, Mary Shelley, and Peacock.

NOTE: Students who have received credit for ENGL 325 may not take this course for credit.

ENGL 331 *18th- and 19th-Century Writing by Women* (3 credits)

This course examines the poetry, prose, and drama of such writers as Astell, Manley, Finch, Haywood, Burney, Radcliffe, Edgeworth, Austen, Wollstonecraft, Shelley, the Brontës, and Eliot in such contexts as the gendering of authorship, the making of literary history, and the uses and transformations of literary conventions.

ENGL 332 *Studies in 19th-Century British Literature* (3 credits)

This course examines selected subjects in the history of 19th-century British literature. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 333 *Studies in 19th-Century British Poetry* (3 credits)

This course examines selected subjects in the history of 19th-century poetry in Britain. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 334 *Studies in 19th-Century British Prose* (3 credits)

This course examines selected subjects in the history of 19th-century British prose literature, including possibly non-fiction and fiction. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 335 *Literature of the Victorian Period* (6 credits)

This course studies the poetry, fiction and other prose writings of such writers as Carlyle, Tennyson, the Brownings, the Brontës, Dickens, George Eliot, Newman, Ruskin, and Arnold. These works are examined in relation to such issues as class divisions, gender roles, the erosion of the authority of institutional religion, the increasing prestige of scientific explanation, the growth of British imperial power.

NOTE: Students who have received credit for ENGL 330 may not take this course for credit.

ENGL 336 *Late Victorian and Edwardian Writing* (3 credits)

This course investigates such matters as late Victorian art and aesthetic theory, the rise of modernism, literary experimentation, and the interrogation of traditional values. Works are selected from such writers as Butler, Pater, Wilde, James, the Rossetis, Swinburne, Morris, Meredith, Schreiner, Hardy, Conrad, and Forster.

ENGL 337 20th-Century British Literature (6 credits)

This course examines modern and contemporary prose, poetry, and drama, and the formal, cultural, social, and political changes and upheavals of a century characterized as “the age of extremes.” Works are selected from such writers as Joyce, Yeats, Mansfield, Woolf, Lawrence, Eliot, Auden, Bowen, Lessing, Hill, Hughes, Stoppard, Carter, Byatt, and Rushdie.

ENGL 340 Modernism (6 credits)

The congeries of experimental movements collectively identified as Modernism, flourishing from prior to World War I until World War II, renegotiated artistic conventions, revived neglected traditions, and turned attention to the primary materials of art (sound, colour, language). In painting emerged a tendency to abstraction, in music a tendency to atonality, and in literature to non-mimetic forms. Experiments abounded in disjunctive, elliptical, impressionistic, allusive, and mythopoeic styles. Avant-garde artists organized into numerous schools, including the Imagists, Surrealists, Dadaists, Constructivists, Futurists, and Vorticists. The literature, often produced by expatriates, was cosmopolitan, elitist, and provocative. Much of the most important work, appropriately enough in an era of female enfranchisement, was written by women. It was also the “Jazz Age,” the nexus of which was the Harlem Renaissance. While the course focuses on the lively cross-fertilization of British and American writing, the international scope of Modernism is also emphasized, as well as its diversity (e.g. in ballet, cinema, music, and painting).

ENGL 341 Modern Fiction (3 credits)

This course examines a developing international literary culture from the early-20th century to the post-war period. Works are selected from such writers as Mann, Kafka, Proust, Stein, Camus, Borges, Nabokov, and Pynchon.

ENGL 345 Modern Drama (3 credits)

This course surveys the main currents of 20th-century drama in a study of such writers as Ibsen, Chekhov, Strindberg, Lorca, Lady Gregory, Ionesco, Barnes, Beckett, Albee, Pinter, Orton, Stoppard, and Handke.

ENGL 346 Modern European Literature (6 credits)

This course surveys late-19th- and 20th-century plays, poems, and novels in translation, chosen from such writers as Dostoevsky, Tolstoy, Ibsen, Chekhov, Gide, Sartre, Colette, Akhmatova, Svevo, Mann, Musil, Böll, and Calvino.

ENGL 349 Modern Poetry in English (3 credits)

This course studies the theory and practice of poets writing in English during the 20th century. Examples are chosen from such writers as Yeats, Pound, Eliot, Crane, Stein, Auden, Stevens, Moore, Bishop, and Merrill, as well as from some more recent poets.

ENGL 350 Contemporary Literature (6 credits)

This course examines the relation between the concepts of the contemporary and the postmodern, through an examination of such writers as Amis, Calvino, Pynchon, Rushdie, Desai, Auster, Kureishi, Winterson, Carter, DeLillo, Dove, Heaney, Wilson, Kushner, Durang, and Walcott.

ENGL 351 20th-Century Writing by Women (3 credits)

Through fiction, personal writings, poetry, and drama, this course examines gender and its discontents in turn-of-the-century and mid-century writing, in writing of the modernist period, and in writing of the politically oriented “second wave” of feminism of the 1960s and 1970s. Its concerns include the developing representation of race, class, and sexual orientation. Works are selected from such writers as Woolf, Hurston, Nin, Plath, Rich, Rule, Walker, Morrison, Cixous, Pollock, Gordimer, and El Saadawi.

ENGL 352 Contemporary Writing by Women (3 credits)

This course deals with fiction, personal writings, poetry, and drama from the late 1970s to the present. Its concerns may include the challenges and possibilities of postmodernism; experiments in writing the life, writing the body, writing between genres, between cultures; collaborative writing; the uses and transformations of traditional and popular forms of writing. Works are selected from such writers as Morrison, Desai, Munro, Marlatt, Scott, Maracle, Aidoo, Winterson, Gallant, Anzaldúa, and Rendell.

NOTE: Students who have received credit for ENGL 354 may not take this course for credit.

ENGL 353 Contemporary Irish Literature (3 credits)

This course examines a selection of Irish literary texts reflecting the social, economic, political, and cultural transformations in both the North and the South, written since 1960 by writers such as Brian Friel, Seamus Heaney, Deirdre Madden, Eavan Boland, Dermot Bolger, Patrick McCabe, John McGahern, and Hugo Hamilton.

NOTE: Students have received credit for this topic under an ENGL 359 or IRST 398 number may not take this course for credit.

ENGL 355 Joyce (3 credits)

This course will examine Joyce’s *Ulysses* in its formal, historical, and cultural contexts. Other writings of Joyce may receive some attention.

ENGL 356 The Irish Short Story Tradition (3 credits)

This course traces the development of the Irish short story from its roots in the Gaelic story-telling tradition and its origins as a literary form in the 19th century, in stories by such writers as James Joyce, Frank O’Connor, Elizabeth Bowen, Sean O’Faolain, Mary Lavin, Edna O’Brien, William Trevor, Ellis Ni Dhuibhne, and Bernard MacLaverty. Students discuss the narrative strategies used to explore various versions of Irish identity.

NOTE: Students have received credit for this topic under an ENGL 359 or IRST 398 number may not take this course for credit.

ENGL 357 *The Irish Literary Revival* (3 credits)

This course traces the origins and nature of the extraordinary literary renaissance that occurred in Ireland from the 1880s to the 1920s. It examines issues such as the rise of Irish cultural nationalism and the concomitant turn to Ireland's past, both mythic and historic, as well as the continuing influence of the Catholic Church and the British state. Writers studied include W.B. Yeats, Lady Gregory, J.M. Synge, James Joyce, and Sean O'Casey.

ENGL 358 *Emigrants and Immigrants: Writing the Irish Diaspora* (3 credits)

This course examines various forms of literary expression — novels, stories, poems, and life-writing (memoirs, autobiographies, letters) — from Ireland and the Irish Diaspora that address the experience of emigration, settlement, and integration of Irish migrants in various countries around the world. Issues explored include concepts of diasporic and transnational identities; the negotiation of forms of self-understanding and self-transformation in the context of hybridity, fluidity, and multiplicity; and the roles of landscape, memory, and cultural production as determining factors in the competing hegemonies of homeland and diaspora. A selection of texts by writers from Ireland (Brian Friel, Joseph O'Connor, Eavan Boland), Canada (D'Arcy McGee, Brian Moore, Jane Urquhart), America (William Kennedy, Alice McDermott, Maeve Brennan), England (Patrick MacGill, Elizabeth Bowen, William Trevor) and Australia (Thomas Keneally, Vincent Buckley) is explored. A selection of letters, diaries, and personal reflections by Irish immigrants is also studied.

NOTE: Students have received credit for this topic under an ENGL 359 number may not take this course for credit.

ENGL 359 *Studies in Irish Literature* (3 credits)

This course examines selected subjects in the history of Irish literature. Specific topics and prerequisites for this course are stated in the Undergraduate Class Schedule.

ENGL 360 *American Literature* (6 credits)

A survey of American literature from the colonial period into the 20th century. Readings are drawn from such writers as Bradstreet, Emerson, Thoreau, Poe, Hawthorne, Melville, Whitman, Dickinson, Twain, James, Douglass, Chopin, Fitzgerald, and Faulkner.

ENGL 361N *American Literature before 1800* (3 credits)

This course concentrates on American Colonial literature from the early Puritan settlements to the aftermath of the Revolution, drawing on the works of such writers as Bradford, Rowlandson, Taylor, Franklin, Paine, and Jefferson.

ENGL 362N *American Literature 1800-1865* (3 credits)

This course focuses on American writing from shortly after the Revolution to after the Civil War, tracing the development of an American literary tradition through the works of such authors as Irving, Emerson, Hawthorne, Melville, Stowe, Douglass, Whitman, and Dickinson.

ENGL 363N *American Literature 1865-1914* (3 credits)

This course traces American literature from the conclusion of the Civil War until World War I, examining such authors as Twain, James, Harte, Jewett, Crane, DuBois, and Wharton.

ENGL 364N *American Literature from 1914 to Mid-20th Century* (3 credits)

This course traces American realism, modernism, and regionalism from World War I until the mid-20th century, emphasizing such writers as Cather, Frost, Stevens, Williams, Moore, Toomer, Faulkner, Fitzgerald, Hemingway, Welty, and Ellison.

ENGL 365 *American Literature from Mid-20th Century to the Present* (3 credits)

This course considers developments in American literature since World War II through the work of such writers as Plath, Bishop, Baldwin, O'Connor, Bellow, Nabokov, Pynchon, Updike, Oates, Morrison, Barthelme, and Walker.

ENGL 366N *The American Novel* (3 credits)

This course concentrates on the American novel from its early emergence, through its experimental and sentimental periods, to its present range of forms, examining the works of such writers as Brockden Brown, Cooper, Stowe, James, Stein, Faulkner, Wright, Morrison, Updike, and Sorrentino.

ENGL 367 *American Poetry* (3 credits)

This course considers the theory and practice of American poetry from the 19th century to the present through the work of such writers as Whitman, Dickinson, Frost, H.D., Pound, Stevens, Williams, Olson, Ginsberg, Waldman, Bishop, and Ashbery.

ENGL 368N *African-American Literature to 1900* (3 credits)

This course traces the emergence of African-American literature, from early poetry and slave narratives to later autobiographies and novels, examining such writers as Wheatley, Turner, Douglass, Jacobs, Harper, Chesnutt, Washington, and DuBois.

ENGL 369 *African-American Literature 1900 to Present* (3 credits)

This course considers African-American literature from the renewal of southern segregation laws, through the Harlem Renaissance, the Civil Rights Movement, and contemporary writing, tracing the works of such writers as Toomer, Hurston, Hughes, Wright, Ellison, Giovanni, Reed, Walker, Dove, and Morrison.

ENGL 370 Canadian Literature (6 credits)

This course examines the development of Canadian literature from its beginnings to the present day through a series of representative works of prose and poetry, written in or translated into English.

ENGL 373 19th-Century Canadian Literature (3 credits)

This course studies the literature written in Canada in a variety of genres as the country evolved from colony to nation. It explores such topics as the relations among discourse, nation building, gender, and genre.

ENGL 374 Canadian Fiction to 1950 (3 credits)

This course studies the themes and technical strategies of Canadian fiction from the 1890s to the mid-20th century by such authors as Roberts, Montgomery, Leacock, Callaghan, Ross, MacLennan, Mitchell, and Smart.

ENGL 376 Postwar Canadian Fiction (3 credits)

This course studies Canadian fiction from 1950 through the mid-1960s as it incorporates the lyrical and the documentary, the universal and the regional, the traditional and the experimental. Authors may include Roy, Wilson, Buckler, MacLennan, Watson, Wiseman, Cohen, and Richler.

ENGL 377 Contemporary Canadian Fiction (3 credits)

This course studies the continuity and development of Canadian fiction from the mid-1960s to the present. Authors may include Laurence, Davies, Carrier, Wiebe, Atwood, Munro, Kogawa, Shields, Gallant, and Ondaatje.

ENGL 378 Modern Canadian Poetry (3 credits)

This course examines the changes in Canadian poetry from the beginning of the 20th century to the mid-1960s by such authors as Pratt, Klein, Scott, Livesay, Birney, Page, Layton, Purdy, and Avison.

ENGL 379 Contemporary Canadian Poetry (3 credits)

This course examines the development of Canadian poetry from the mid-1960s to the present by such authors as Atwood, Ondaatje, Nichol, MacEwan, Kroetsch, Webb, Kogawa, Dewdney, and Brand.

NOTE: Students who have received credit for ENGL 379N may not take this course for credit.

ENGL 380 First Nations/North American Native Literature (3 credits)

This course studies the native literature of Canada and/or the United States, from oral performance traditions, transcriptions and translations into English, and writing in English by such authors as Johnston, Campbell, King, Highway, Momaday, Erdrich, Allen, and Silko.

ENGL 381 Literature of Ethnic America (3 credits)

This course examines questions of ethnicity in American literature, challenging what Crèvecoeur described in the 18th century as the melting pot from the perspective of such writers as Cahan, (Henry and Philip) Roth, Baldwin, Cisneros, Kingston, Silko, Tan, and Hosseini.

ENGL 382 Postcolonial Literature (3 credits)

This course offers a historical and theoretical introduction to literature in English from formerly colonized regions. The course examines a selection of texts — from regions such as Africa, South Asia, and the Caribbean — that address such issues as the spread of English through British colonial contact and the development of writing in English both during and after the colonial period.

ENGL 383 African Literature (3 credits)

This course considers how literature in English by writers from sub-Saharan Africa is embedded in the history and experience of colonization and decolonization. The course includes such authors as Achebe, Soyinka, Saro-Wiwa, Emecheta, Okri, Armah, Aidoo, Farah, Dangaremba, Coetzee, and Gordimer. The focus is on the political and aesthetic issues raised by African writing in English.

ENGL 385 Studies in Postcolonial Literature (3 credits)

This course examines selected subjects in the field of postcolonial literature. Specific topics and prerequisites for this course will be stated in the Undergraduate Class Schedule.

ENGL 386 Caribbean Literature (3 credits)

This course explores how Caribbean literature in English from nations such as Barbados, Trinidad, Antigua, Jamaica, Grenada, St. Lucia, and Guyana is implicated in the history of slavery, colonialism, and postcolonialism. The work of such authors as Bennett, Walcott, Brathwaite, Goodison, James, Selvon, Lamming, Naipaul, Brodber, Cliff, and Kincaid is examined in relation to the writers' socio-cultural contexts and to the political and aesthetic issues raised by their texts.

ENGL 387 South Asian Literature (3 credits)

This course studies literature from South Asia written in English by authors from India, Pakistan, Bangladesh, and Sri Lanka, such as Rushdie, Anand, Das, Narayan, Ghosh, Desai, Chaudhuri, Markandaya, Sahgal, Selvadurai, Sidhwa, Rao, and Mistry. The focus is on the significance of precolonial, colonial, and postcolonial socio-cultural concerns as expressed in a variety of literary genres. Attention is given to English as a tool of colonization as well as a means for critiquing cultural hegemony.

ENGL 388 *Literature from Australia and New Zealand* (3 credits)

This course examines literature in English from Australia and New Zealand by such writers as White, Malouf, Jolley, Carey, Stead, Mudrooroo, Stow, Johnson, Frame, Hulma, Wedde, and Kenneally. Central to the course is a discussion of the impact of colonialism, and the ongoing relationship between settler and aboriginal communities as it infects a variety of literary genres. Literature from the Pacific islands may also be considered.

NOTE: Students who have received credit for ENGL 388N may not take this course for credit.

ENGL 389 *History of Criticism and Literary Theory* (3 credits)

This course surveys and contrasts major theories of criticism, with attention to methodologies and historical contexts. Texts are chosen from such representative theorists as Plato, Aristotle, Augustine, Lessing, Bakhtin, and in English Sidney, Dryden, Johnson, Coleridge, Arnold, Eliot, Woolf, Empson, Burke, and Frye.

ENGL 390 *Studies in Rhetoric* (3 credits)

This course offers an inquiry into the nature and function of rhetoric, the art of convincing others, through an examination of such influential classical writers as Aristotle, Cicero, and Quintilian, as well as the place of rhetoric in contemporary critical discourse. This course offers, through written exercises, practical experience in the development of rhetorical techniques.

NOTE: Students who have received credit for ENGL 390N may not take this course for credit.

ENGL 391 *Studies in Literature and Science* (3 credits)

This course compares the modes of description, investigation, and analysis in science and literature as reflections of the division of modern knowledge into the arts and sciences. How have scientific discoveries enriched or impoverished literature or critical thinking? How have literary texts represented science and the scientist? In what ways has scientific investigation been informed by literature? How does the comparison with science make it possible to explore and question the methodologies that have been developed from the study of literature? The course may focus on such topics as the development of the microscope, the telescope, evolutionary theory and neuroscience.

NOTE: Students who have received credit for this topic under an ENGL 326 number may not take this course for credit.

ENGL 392 *Aspects of Criticism and Literary Theory* (3 credits)

This course examines selected subjects in criticism and literary theory.

ENGL 393 *Gender and Sexuality in Literary Studies* (3 credits)

This course examines the development of the terms “gender” and “sexuality” as categories of historical analysis and literary interpretation by reading feminist and queer theories of gender and sexuality such as those of Rubin, Butler, Sedgwick, and Foucault alongside a range of historical and contemporary literary texts.

NOTE: Students who have received credit for ENGL 445 may not take this course for credit.

ENGL 394 *Contemporary Critical Theory* (3 credits)

This course introduces students to various interpretive strategies in contemporary critical theory, through a study of such topics as structuralism, narratology, debates about genealogy, deconstruction, psychoanalytic theory, gender and performativity. Readings may include texts by Nietzsche, Saussure, Barthes, Foucault, Derrida, Eco, Austin, Cixous, and Sedgwick.

NOTE: Students who have received credit for ENGL 394N may not take this course for credit.

ENGL 395 *Technical Writing* (3 credits)

Prerequisite: ENGL 213. This course examines written and visual strategies for communicating information in technical fields. Practice includes experience in audience analysis and visual design in the preparation of such documents as technical abstracts, reports, proposals, descriptions, and instructional manuals.

NOTE: Students who have received credit for this course may not subsequently take ENGL 206–213 for credit.

ENGL 396 *Advanced Composition and Professional Writing* (6 credits)

Prerequisite: ENGL 213 or placement test. This course is intended for students already in control of the essentials of composition who wish to develop their ability to write effectively for professional purposes. Emphasis is placed on writing for specific audiences within a variety of rhetorical situations and on peer revision and editing in a workshop format.

NOTE: Students who have received credit for this course may not subsequently take ENGL 206–213 for credit.

ENGL 397 *Business Writing* (3 credits)

Prerequisite: ENGL 213. This course examines written and visual strategies for communicating information in business contexts. Practice includes experience in audience analysis and visual design in the creation of such business documents as letters, memos, minutes, brochures, press releases, and company newsletters.

NOTE: Students who have received credit for this course may not subsequently take ENGL 206–216 for credit.

ENGL 398 *Selected Topics in English* (3 credits)**ENGL 399 *Selected Topics in English* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

ENGL 410 *Creative Non-Fiction Writing* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of creative non-fiction (journal, personal essay, travel, biography and autobiography) including the reading of selected texts and discussion and criticism of students' work.

ENGL 411 *Script Writing for Radio, Screen, and Television* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the composition and development of creative scripts for radio, screen, and television. In any one year, the course may concentrate on one or two of these areas.

ENGL 412 *Writing of Children's Literature* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 225 or 226 or 227, or permission of the Department. This course is a workshop in the writing of prose, poetry, and drama for children, including an exploration of the literary techniques appropriate to the sensibilities of children.

ENGL 413 *Publishing and Editing* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 225 or 226 or 227, or permission of the Department. This course explores such topics as the process of founding and operating small presses or magazines, producing anthologies, and editing individual manuscripts and books.

ENGL 425 *Advanced Creative Writing: Poetry* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 225 or permission of the Department. Through intensive analysis and discussion of students' work, experimentation with a variety of forms, and selected reading, this workshop helps students extend their grasp of poetics and their competence in the writing of poetry.

ENGL 426 *Advanced Creative Writing: Prose Fiction* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 226 or permission of the Department. Through intensive analysis and discussion of submitted work and directed reading in modern fiction, this workshop extends the development of students' narrative skills and their understanding of fictional forms.

ENGL 427 *Advanced Creative Writing: Drama* (6 credits)

Prerequisite: Enrolment in a Creative Writing program and ENGL 227 or permission of the Department. Through reading of contemporary playwrights and intensive discussion and analysis of submitted work, this workshop helps students refine their skills in the process of completing a full-length play.

ENGL 428 *Advanced Studies in Creative Writing* (6 credits)

Prerequisite: Enrolment in a Creative Writing program, or permission of the Department. See current Undergraduate Class Schedule for specific workshop prerequisites. This course is an advanced workshop intended for students who have completed at least six credits of workshops at the 400 level in an appropriate field. The subject and prerequisites for each year are found in the current Undergraduate Class Schedule. Submission of a brief portfolio may be required for admission.

ENGL 429 *Advanced Studies in Creative Writing* (3 credits)

Prerequisite: Enrolment in a Creative Writing program, or permission of the Department. See current Undergraduate Class Schedule for specific workshop prerequisites. This course is an advanced workshop intended for students who have completed at least six credits of workshops at the 400 level in an appropriate field. The subject and prerequisites for each year are found in the current Undergraduate Class Schedule. Submission of a brief portfolio may be required for admission.

ENGL 430 *Old English* (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the language, literature, and culture of the Anglo-Saxon era, including such texts as elegaic lyrics and sections of *Beowulf*.

ENGL 432 *Middle English* (6 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the variety of texts in English dialects from 1200 to 1500, including such works as *Sir Gawain and the Green Knight* and other romances, *Piers Plowman*, *Pearl*, the *Showings* of Julian of Norwich, other religious and social discourse, lyrics, and drama.

ENGL 434 *Advanced Studies in Early English Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 435 *Women Writers of the Early Modern Period* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the emergence into print of women writers from the late-16th to the late-17th centuries, by exploring such issues as the construction of literary history, histories of gender and sexuality, the relations between gender and genre. Works are chosen from such writers as Sidney, Sowernam, Wroth, Cary, Lanyer, Philips, Cavendish, Behn, Killigrew, Manley, and Trotter.

ENGL 436 *Literature of the Civil War and Commonwealth Period* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the prose and poetry of the 1630s through the 1650s. It explores the ways in which the Civil War was represented by such writers as Herrick, Suckling, Cowley, Bradstreet, Milton and Marvell. Political tracts, journalism, and private papers and diaries may also form part of the material of the course.

ENGL 437 *Advanced Studies in Renaissance and Early Modern Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 438 *History, Politics, and Literature in the 18th Century* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course examines the relations among the categories of history, politics, and literature, and their development as distinct discourses over the course of the century, through a study of such topics as the status of religion, the rise of science, the expansion of empire, the development of aesthetic discourse, and the construction of the category of the neoclassical.

ENGL 439 *The Rise of Criticism and Literary History* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course traces the joint development of the discourses of literary criticism and literary history from 1660 to the legislation assigning copyright to authors in the late-18th century. Examples are drawn from such writers as Dryden, Dennis, Addison, Shaftesbury, Hume, and Johnson.

ENGL 440 *Advanced Studies in Late-17th- and 18th-Century Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 441 *Forms of 18th- and 19th-Century Fiction* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course may focus on a single writer, a type of fiction such as the gothic or the epistolary, or a particular issue in the development of the novel, such as realism or the emergence of women's fiction.

ENGL 442 *Comparative 19th-Century Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies literary developments in the United Kingdom, the United States, and Canada, including such issues as Romanticism, the development of national literatures, conceptions of place and landscape, and responses to cultural change.

ENGL 443 *Advanced Studies in 19th-Century Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 444 *Advanced Studies in Gender and Sexuality* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar in the study of theories of gender and sexuality as they can be used in the interpretation of historical and/or contemporary texts.

NOTE: Students who have received credit for ENGL 445 may not take this course for credit.

ENGL 446 *Advanced Studies in 20th-Century Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 447 *Advanced Studies in Literary Theory* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 449 *The American Postmodern* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course focuses on postmodern American writers in the context of the critical debates about what constitutes the postmodern: formally, generically, and politically. It considers such writers as Antin, Ashbery, Waldman, Pynchon, Barthelme, Barth, Acker, Ford, and Morrison.

ENGL 450 *Advanced Studies in American Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. A seminar on a selected topic, text, or author. Specific content varies from year to year.

ENGL 451 *History and Ideology in Canadian Literature* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies the treatment in Canadian literature of such historical and political events, issues, and ideologies as the Conquest, the railroad, the threat of American domination, immigration, and the Canadian west.

ENGL 452 *Recent Experiments in Canadian Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course studies contemporary writing that breaks with or interrogates traditional literary genres and forms. Examples are drawn from such authors as Kroetsch, Marlatt, Ondaatje, Highway, Dewdney, Mouré, and Nichol.

ENGL 453 *Advanced Studies in Canadian Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 454 *Advanced Studies in Postcolonial Writing* (3 credits)

Prerequisite: Nine credits at the 300 level or permission of the Department. This course is a seminar on a selected topic, text, or author.

ENGL 455 *The American Nation* (3 credits)

Prerequisite: Nine credits of English literature at the 300 level or permission of the Department. This course focuses on such issues in American literature as the cosmopolitan, the regional, the local, and the transnational, exploring the theoretical and literary ways in which writers enshrine, consolidate, or call into question ideas of the American nation.

ENGL 470 *Honours Seminar* (3 credits)

Prerequisite: Enrolment in Honours English Literature and 30 credits in English. The topic of this course varies from year to year. The course provides the opportunity for final-year honours students to apply their experience of literature, literary theory, and criticism on a more advanced level.

NOTE: In consultation with the honours/majors advisor, honours students may substitute another course at the 400 level for ENGL 470.

ENGL 474 *Honours Essay* (3 credits)

Prerequisite: Enrolment in Honours English Literature and 30 credits in English. With the permission of the Department, an honours student may arrange a tutorial program with a faculty member, culminating in the writing of a long paper.

ENGL 480 *Independent Studies* (3 credits)

Prerequisite: Enrolment in an English program and nine credits at the 300 level. With the permission of the Department, a student may arrange a tutorial program with a faculty member.

ENGL 486 *SLS-International Literary Seminars* (3 credits)

Prerequisite: Permission of the coordinator of Creative Writing, or designate. This course, held at one of several locations around the world in conjunction with Summer Literary Seminars (SLS), offers intensive workshops in the writing of fiction, poetry, or drama, and includes discussion and written criticism of students' work and a series of lectures. Students are expected to read widely and to submit their own work for discussion and analysis. Grading is based on participation, and on submission of a final portfolio and an essay.

ENGL 490 *Joint Tutorial in History and English* (6 credits)

Prerequisite: Enrolment in an English program or nine credits in English Literature. A tutorial for students in an English and History Joint Specialization program.

ENGL 498 *Advanced Topics in English* (3 credits)

ENGL 499 *Advanced Topics in English* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Corps professoral

Directeur

PHILIPPE CAIGNON, PhD Montr., Professeur agrégé

Professeures et professeurs titulaires

PAUL BANDIA, PhD Montr.

OLLIVIER DYENS, PhD Montr.

DAVID GRAHAM, PhD W.Ont.

LUCIE LEQUIN, PhD C'dia.

FRANÇOISE NAUDILLON, PhD Cergy-Pontoise

SHERRY SIMON, PhD Montr., Provost's Distinction

JUDITH WOODSWORTH, PhD McG.

Professeures et professeurs agrégés

PAULA BOUFFARD, PhD U.Q.A.M.

PIER-PASCALE BOULANGER, PhD Montr.

MARC ANDRÉ BROUILLETTE, PhD Sorbonne

SYLVAIN DAVID, PhD U.Q.A.M.

DEBORAH FOLARON, PhD Binghamton

BENOÎT LÉGER, PhD McG.

PATRICK LEROUX, PhD Paris III

DENIS LIAKIN, PhD W.Ont.

SOPHIE MARCOTTE, PhD McG.

GENEVIÈVE SICOTTE, PhD Montr.

NATALIA TEPLOVA, PhD McG.

Professeurs adjoints

DAVY BIGOT, PhD U.Q.A.M.

ADEL JEBALI, PhD U.Q.A.M.

Chargées et chargés d'enseignement

SVETLA KAMENOVA, MA Geneva, MA Sofia

DANIÈLE MARCOUX, PhD Montr.

FABIEN OLIVRY, MA Besançon

MIRELLA VADEAN, PhD C'dia.

CHRISTINE YORK, MA C'dia.

For the complete list of faculty members, please consult the Department website.

Localisation

Campus Sir George Williams

J.W. McConnell, Salle : LB 601

514-848-2424, ext. 7500/7509

Objectifs du département

L'appellation Études françaises reflète le concept pluridisciplinaire sur lequel se fondent les deux volets de notre mission universitaire : l'enseignement et la recherche. La recherche pure et appliquée se pratique dans les domaines les plus variés de la discipline en étroite liaison avec l'enseignement. De plus, nous participons à la vie intellectuelle et professionnelle de la collectivité, à l'échelle nationale et internationale.

Le Département d'études françaises a une double vocation. Il offre d'une part de solides programmes de langue, littérature, traduction et rédaction aux étudiantes et étudiants qui viennent y chercher une formation spécialisée. Il joue d'autre part un rôle capital au sein de l'Université en offrant un vaste éventail de cours de langue, linguistique, littérature et civilisation aux étudiantes et étudiants qui souhaitent compléter la formation qu'elles ou ils reçoivent dans d'autres départements.

Programmes

Il appartient à chaque étudiante et étudiant de remplir toutes les conditions requises dans son programme. L'exposant 3 ou 6 indique le nombre de crédits.

N.B. : Chaque candidate et candidat aux programmes de traduction ou de rédaction professionnelle doit inclure à son dossier une lettre d'intention rédigée dans sa langue principale, soit le français pour l'étudiante ou l'étudiant en rédaction.

N.B. : Avant de s'inscrire, les étudiantes et étudiants devront faire approuver leur programme par un membre désigné du département.

NOTE: FRENCH AS A SECOND LANGUAGE

All students not admitted into a program in the Département d'études françaises are required to consult the Études françaises website for the placement test (which is also available at the Department) in order to determine the level of elective French courses for which they can obtain credit. If in doubt call the French Department at 514-848-2424, ext. 7500 or 7518.

FRAN 211 is restricted to students with no previous training in French. FRAN 212 is designed to follow FRAN 211, or may be taken if students have little previous training in French. FRAN 211 and 212 are not intended for students who have attended high school in Quebec.

NOTE: Some students with previous French language background are restricted to certain levels of French language courses at Concordia. These restrictions are indicated as "exemptions" on the transcript. Apart from any exemptions which may have been granted to undergraduate students, the following restrictions apply to ALL students:

1) Students who have completed any 602-900-level Cegep courses or who have graduated from Francophone secondary institutions may obtain a maximum of six credits in the range of FRAN 301-321 at Concordia. No credit is awarded for language courses numbered FRAN 211-221.

2) Students who have completed any 601-series Cegep courses or who have attended a Francophone Cegep may ONLY obtain credits for Concordia French Language courses at the 400 level (FRAA 400-441). No credit is awarded for language courses numbered 211-221 or 301-321.

THE DEPARTMENT RESERVES THE RIGHT TO TRANSFER A STUDENT TO A HIGHER- OR LOWER-LEVEL LANGUAGE COURSE IF IT IS DEEMED THAT THE COURSE FOR WHICH THE STUDENT HAS REGISTERED IS NOT APPROPRIATE FOR THE EXTENT OF HIS OR HER KNOWLEDGE OF THE LANGUAGE.

60 BA Spécialisation en études françaises

N.B. : Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits.

A. Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français :

18 crédits à choisir parmi les suivants : FRAN 301⁶, 302³, 303³, 306³, 320³, 321³; FRAA 410³, 411³, 412³, 413³

15 crédits FLIT 300³, 302³, 303³, 305³, 308³

27 crédits à choisir parmi les cours FLIT de niveaux 300 et 400; FTRA 304³; FRAA 440³, 441³

B. Pour les étudiantes et étudiants ayant effectué leurs études secondaires en français :

12 crédits à choisir parmi les cours FRAA de niveau 400

15 crédits FLIT 300³, 302³, 303³, 305³, 308³

33 crédits à choisir parmi les cours FLIT de niveaux 300 et 400; FTRA 304³; FRAA 440³, 441³

45 BA Majeure en études françaises

Option : Langue ou littératures de langue française

N.B. : Les principaux critères de classement sont la langue d'enseignement des études secondaires, les notes obtenues et les résultats du test d'auto-évaluation du département. Pour obtenir leur diplôme, les étudiantes et étudiants doivent suivre tous les cours du programme dans la voie (A ou B) où ils sont inscrits.

A. Option : Langue ou littératures de langue française : français langue seconde

Pour les étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français :

Tronc commun

18 crédits à choisir parmi les cours FRAN 213⁶ (ou 214³ et 215³), 218³, 219³, 221³, 301⁶, 302³, 303³, 305³, 306³, 320³, 321³; FRAA 410³, 411³, 412³, 413³

6 crédits à choisir parmi les cours FLIT 220³, 230³, 240³, 250³, 280³, 298³

Volet langue

21 crédits à choisir parmi les cours FRAN 318³, 319³, 320³, 321³; FRAA de niveau 400

OU

Volet littérature

21 crédits à choisir parmi les autres cours FLIT de niveaux 300 et 400; FTRA 304³; FRAA 440³, 441³

B. Option : Langue ou littératures de langue française

Pour les étudiantes et étudiants ayant effectué leurs études secondaires en français :

Tronc commun

15 crédits à choisir parmi les cours FRAN 306³, 320³, 321³; FRAA 410³, 411³, 412³, 413³, 423³, 440³

9 crédits à choisir parmi les cours FLIT 300³, 302³, 308³ ou 303³, 305³, 308³, 382³

- Volet langue*
- 21 crédits à choisir parmi les cours FRAN 320³, 321³; FRAA de niveau 400; FTRA 304³; ou parmi 6 crédits FLIT OU
- Volet littérature*
- 21 crédits à choisir parmi les autres cours FLIT du département de niveaux 300 et 400; FTRA 304³; FRAA 440³, 441³
- 45 BA Majeure en études françaises***
Option : Rédaction professionnelle
- N.B. : Cette majeure est destinée à celles et ceux qui possèdent déjà une bonne maîtrise du français et qui souhaitent acquérir une formation professionnelle en rédaction. La majeure débute au niveau 400. L'étudiante ou l'étudiant dont le résultat au test d'évaluation du département n'atteint pas le niveau nécessaire pourra s'y préparer en suivant, hors majeure, un maximum de 12 crédits de niveau 300, choisis parmi FRAN 301⁶, 302³, 303³, 306³, 318³, 319³, 320³, 321³.
- 15 crédits FRAA 410³, 411³, 412³, 413³, 432³
 3 crédits à choisir parmi les cours FTRA 204³; FRAA 403³, 404³
 3 crédits à choisir parmi les cours FLIT de niveaux 300 et 400
 3 crédits à choisir parmi les cours FRAA 440³, 441³ et FLIT de niveau 400
 21 crédits FRAA 420³, 421³, 422³, 423³, 430³, 431³, 493³
- *Les admissions sont suspendues pour l'année universitaire 2013-2014.

- 48 BA Majeure en études françaises**
Option : Traduction
 Les étudiantes et étudiants inscrits à un programme de traduction doivent remettre leurs travaux en français dans les cours de littérature.
- 1^{re} étape*
- 6 crédits ENGL 212³ et 213³
 6 crédits à choisir parmi les cours FRAN 301⁶ ou 302³ et 303³; FRAN 321³; FRAA 410³, 411³, 412³, 413³
- 2^e étape*
- 6 crédits à choisir parmi les cours FLIT de niveaux 300 et 400; FRAA 440³, 441³
 6 crédits à choisir parmi les cours FRAN 306³ et 321³; FRAA 410³, 411³, 412³, 413³, 423³, 431³, 432³
 9 crédits FTRA 200³, et FTRA 201³ et 207³ ou FTRA 202³ et 208³
- 3^e étape*
- 6 crédits à choisir parmi les cours FTRA 203³ ou 204³, 301³ ou 304³, 305³ ou 306³, 310³, 403³ ou 404³, 405³ ou 406³, 408³
 3 crédits à choisir parmi les cours FTRA 412³, 414³ et 418³
 6 crédits en littérature d'expression anglaise
- 24 Mineure en langue française**
 24 crédits de langue, dont un maximum de 12 crédits FRAN de niveau 200, choisis dans un ordre accepté par le département, parmi les cours suivants :
- Un maximum de 18 crédits à choisir parmi les cours FRAN 213⁶, 214³, 215³, 218³, 219³, 221³, 301⁶, 302³, 303³, 305³, 306³, 318³, 319³, 320³, 321³; FLIT 230³, 240³
 - Un minimum de six crédits à choisir parmi les cours FRAN 321³; FRAA de niveau 400
- 24 Mineure en littératures de langue française**
 24 crédits en littératures de langue française choisis en consultation avec le département
- 30 Certificat en langue française**
 Ce programme est accessible soit aux vrais débutants soit à des personnes qui ont déjà une certaine connaissance du français. Dans les deux cas, il permettra d'accéder à un niveau relativement avancé de communication et d'expression en français.
- 30 crédits FRAN, choisis à un niveau et dans un ordre acceptés par le département,
- 18 crédits FRAN 211⁶, 212⁶, 213⁶ (ou 214³ et 215³), 218³, 219³, 221³, 301⁶ (ou 302³ et 303³), 305³, 306³, 320³, 321³
 - 12 crédits FRAN 301⁶ (ou 302³ et 303³), 305³, 306³, 320³, 321³; FRAA 405³, 410³, 411³, 412³, 413³, 440³

N.B. : Ce certificat exige normalement plus d'une année de scolarité.

Programme de traduction (formule standard et coopérative)

69 BA Spécialisation en traduction

- N.B. : 1. Le BA Spécialisation en traduction (formule standard et formule coopérative) est un programme contingenté. Comme il demande une excellente connaissance du français et de l'anglais, les étudiantes et étudiants admis devront subir des tests de placement dans les deux langues. Les cours FTRA sont réservés en priorité aux étudiantes et étudiants inscrits dans les programmes de traduction.
2. Le programme de BA Spécialisation en traduction se présente sous deux formules : la formule standard et la formule coopérative. Les conditions d'admission au BA spécialisé en traduction de formule coopérative comprennent, outre celles du programme spécialisé standard, d'autres filtres du type lettre d'intention, examen écrit, entrevue. La formule coopérative comprend les mêmes cours, en nombre et en nature, que la formule standard; cependant, la séquence des

cours varie et trois stages rémunérés de quatre mois chacun, viennent s'ajouter et alternent avec les sessions d'étude (voir calendrier ci-après). Ces stages se déroulent au sein de services linguistiques et sont consacrés à des tâches en traduction ou dans l'un des domaines connexes : rédaction, terminologie, documentation, etc.

Année	Automne	Hiver	Été
1	Cours I	Cours II	Cours III
2	Stage I	Cours IV	Stage II
3	Cours V	Stage III	Cours VI

Les étudiantes et étudiants du programme coopératif sont encadrés chacune et chacun personnellement et doivent satisfaire aux exigences de la Faculté des arts et des sciences et de l'Institut d'enseignement coopératif pour se maintenir dans le programme coopératif. La liaison entre l'étudiante ou l'étudiant, les employeurs et l'Institut d'enseignement coopératif est du ressort du comité du programme coopératif en traduction du Département d'études françaises.

Pour plus de renseignements sur l'Institut d'enseignement coopératif, voir la §24 de cet annuaire.

3. Le programme comporte deux options : la traduction du français vers l'anglais ou de l'anglais vers le français.

Normalement, l'étudiante ou l'étudiant choisira l'une ou l'autre de ces deux options. Dans de rares cas, certaines candidates et certains candidats pourront satisfaire aux exigences des deux options.

4. Les étudiantes et étudiants du programme de BA Spécialisation en traduction doivent obtenir une note minimale de C dans tous les cours de traduction. Si la note obtenue est inférieure à C, les étudiantes et étudiants devront reprendre le cours dans l'année qui suit. Une seule reprise est permise. Si cette exigence n'est pas satisfaite ou en cas d'échec, les étudiantes et étudiants seront radiés du programme. En cas de probation ou de radiation, les étudiantes et étudiants recevront un avis écrit de la direction du département.

5. Les étudiantes et étudiants inscrits à un programme de traduction doivent remettre leurs travaux en français dans les cours de littérature.

Option A : français-anglais

1^{re} étape

- 6 crédits à choisir parmi les cours FRAA 410³, 412³ ou 413³
N.B. : Une étudiante ou un étudiant qui, à l'examen d'admission, n'a pas obtenu une note lui permettant de suivre les cours de niveau 400 peut s'inscrire au(x) cours FRAN 301⁶ ou 302³ et 303³ ou 306³ ou 321³ et suivre les cours ci-dessus en 2^e année au plus tard.

- *6 crédits ENGL 212³ et 213³ ou 396⁶

- 6 crédits à choisir parmi les cours FLIT de niveaux 300 et 400; FRAA 440³, 441³

- 6 crédits en littératures de langue anglaise

- 9 crédits FTRA 200³, 201³ et 207³

2^e étape

- 15 crédits FTRA 203³, 301³, 305³, 310³ et 411³

- 6 crédits de linguistique choisis en consultation avec la conseillère pédagogique ou le conseiller pédagogique

3^e étape

- 6 crédits à choisir parmi les cours FTRA 401³, 403³, 405³, 408³

- 3 crédits FTRA 409³

- 3 crédits à choisir entre les cours FTRA 412³, 414³ et 418³

- 3 crédits à choisir parmi FTRA 416³, 452³, 455³, 458³

Option F : anglais-français

1^{re} étape

- 6 crédits à choisir parmi les cours FRAA 410³, 412³, 413³, 423³, 430³, 431³, 432³

- *6 crédits ENGL 212³ et 213³ ou 396⁶

N.B. : Une étudiante ou un étudiant qui n'est pas admissible au cours ENGL 212³ peut s'inscrire aux cours ESL 204⁶ ou ENGL 206³ et suivre les cours ENGL 212³ et 213³ en 2^e année au plus tard.

- 9 crédits à choisir parmi les cours FLIT de niveaux 300 et 400 ou FRAA 440³, 441³

- 3 crédits à choisir parmi les cours de littérature de langue française FLIT 447³ ou 449³, ou parmi les cours FRAA 421³, 423³, 430³, 431³

- 9 crédits FTRA 200³, 202³ et 208³

2^e étape

- 15 crédits FTRA 204³, 304³, 306³, 310³ et 411³

- 6 crédits en linguistique à choisir entre FRAA 400³, 401³, 403³, 404³, 421³, 422³

3^e étape

- 6 crédits à choisir parmi les cours FTRA 402³, 404³, 406³, 408³

- 3 crédits FTRA 410³

- 3 crédits à choisir entre les cours FTRA 412³, 414³ et 418³

- 3 crédits à choisir parmi les cours FTRA 416³, 452³, 455³, 458³

*L'étudiante ou l'étudiant peut comptabiliser les 6 crédits d'ENGL 212³ et 213³ ou 396⁶ dans les 24 crédits à réaliser hors département. Dans ce cas, pour les remplacer il devra effectuer 6 crédits parmi ceux offerts au département.

Cours

Les cours du département ayant reçu de nouveaux numéros, les étudiantes et étudiants trouveront une liste d'équivalences à la section 200.1.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Si une étudiante ou un étudiant s'inscrit à un cours de langue d'un niveau inférieur ou supérieur à ses connaissances, le département se réserve le droit de lui demander de s'inscrire à un cours d'un niveau plus approprié.

In cases where students are enrolled in language classes which do not match their linguistic skills, the Department reserves the right to advise them to transfer into a class at a more appropriate level.

Langue

• Français langue seconde

FRAN 211 *French Language: Elementary* (6 crédits)

This course is restricted to students having no previous training in French. It includes a comprehensive introduction to the basic structures and vocabulary of French and should enable students to acquire an ability to speak and understand simple conversational French. Both oral and written aspects of the language are presented, with special emphasis on oral skills. Laboratory sessions are included.

Laboratory sessions are included.

NOTE: Students who have received credit for FRAN 200 or FRAN 201 may not take this course for credit.

FRAN 212 *French Language: Transitional Level* (6 crédits)

Prerequisite: FRAN 211 or equivalent. The aim of this course is to provide students who have studied either one year of French at the university or post-secondary level, or two years of French at the secondary level or equivalent, with an opportunity to improve their levels of comprehension and expression so that they will be able to communicate with greater ease in written and oral French. Students will expand their repertory of linguistic structures and vocabulary through in-class directed conversation groups, homework, oral lab, and written exercises. Laboratory sessions are included.

FRAN 213 *Langue française : niveaux intermédiaires I et II* (6 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit quatre ans de français à l'école secondaire, soit deux ans de français au niveau collégial, soit 12 crédits de français à l'université, ou l'équivalent. Par un apprentissage et approfondissement de mécanismes grammaticaux, du vocabulaire, de techniques de compréhension et production écrites et orales, l'étudiant sera amené à développer les compétences nécessaires pour communiquer avec aisance en français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 204 ou 205 ou 214 ou 215 ne peuvent obtenir de crédits pour ce cours.

FRAN 214 *Langue française : niveau intermédiaire I* (3 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours s'adresse aux étudiantes et étudiants ayant suivi soit quatre ans de français à l'école secondaire, soit deux ans de français au niveau collégial, soit 12 crédits de français à l'université, ou l'équivalent. Par un apprentissage et approfondissement de mécanismes grammaticaux, du vocabulaire, de techniques de compréhension et production écrites et orales, l'étudiant sera amené à développer les compétences nécessaires pour communiquer avec aisance en français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 204 ou 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 215 *Langue française : niveau intermédiaire II* (3 crédits)

Préalable : FRAN 214 ou l'équivalent. Ce cours est la suite du FRAN 214. Il vise à donner à l'étudiant une plus grande aisance dans son utilisation du français oral et écrit. Les travaux prendront la forme d'exercices variés de grammaire, de vocabulaire, de compréhension et production de textes écrits, et d'interaction orale.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 205 ou 213 ne peuvent obtenir de crédits pour ce cours.

FRAN 218 *Initiation au français oral* (3 crédits)

Préalable : FRAN 213 ou l'équivalent. Ce cours de niveau intermédiaire s'adresse à des étudiantes et à des étudiants qui ont une connaissance de base du français et qui désirent renforcer leur compétence en communication orale. Une démarche combinant compréhension auditive et expression orale permettra de développer aussi bien les habiletés à comprendre la langue parlée que l'aisance à prendre la parole.

FRAN 219 *Initiation au français écrit* (3 crédits)

Préalable : FRAN 213 ou l'équivalent. Ce cours de niveau intermédiaire s'adresse à des étudiantes et étudiants qui ont une bonne compétence en communication orale en français et qui désirent renforcer leur compétence en communication écrite. Il a principalement pour objectif d'amener les étudiantes et les étudiants à consolider leurs connaissances de la structure de la phrase de base et de ses transformations, et à enrichir leur vocabulaire. Les étudiantes et les étudiants seront également initiés à la composition de textes divers et à deux techniques d'expression : le plan et le résumé.

FRAN 221 *Correction phonétique* (3 crédits)

Préalable : FRAN 212 ou l'équivalent. Ce cours s'adresse à des étudiantes et des étudiants dont la langue maternelle n'est pas le français et qui souhaitent améliorer leur prononciation. Une approche systématique, qui combine des activités de perception et d'articulation allant des sons isolés à la phrase, leur permettra d'acquérir et de mettre en pratique les règles de la phonétique française (prononciation, liaison, intonation).

FRAN 298 Étude d'un sujet particulier (3 crédits)

Les prélabes de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

FRAN 301 Langue française : niveaux d'approfondissement I et II (6 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Ce cours d'approfondissement est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français mais qui ont besoin d'améliorer leur expression écrite et orale. Le cours est essentiellement axé sur la pratique de la lecture, sur la compréhension de textes et de documents audiovisuels, ainsi que sur la pratique de la grammaire et de la rédaction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 302 ou 303 ne peuvent obtenir de crédits pour ce cours.

FRAN 302 Langue française : niveau d'approfondissement I (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Ce cours de français, niveau d'approfondissement I, est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français mais qui ont besoin d'améliorer leur expression orale et écrite. Le cours est essentiellement axé sur la pratique de la lecture, sur la compréhension de textes et de documents audiovisuels, ainsi que sur la pratique de la grammaire et de la rédaction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 303 Langue française : niveau d'approfondissement II (3 crédits)

Préalable : FRAN 302 ou l'équivalent. Ce cours de français, niveau d'approfondissement II, est destiné aux étudiantes et étudiants qui possèdent déjà une bonne connaissance du français mais qui ont besoin d'améliorer leur expression écrite et orale. Le cours est essentiellement axé sur la pratique de la grammaire et de la rédaction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 301 ne peuvent obtenir de crédits pour ce cours.

FRAN 305 Communication orale (3 crédits)

Préalable : FRAN 301 ou 303 ou l'équivalent. Ce cours s'adresse à des étudiantes et des étudiants non francophones qui souhaitent améliorer les aptitudes nécessaires à une communication orale efficace en français. Des présentations théoriques et des activités pratiques exploitant des situations de communication variées leur permettront d'acquérir une plus grande aisance et de mieux organiser leur discours. Des activités d'écoute basées sur des documents authentiques leur permettront d'augmenter leur capacité de compréhension en français.

FRAN 306 Communication écrite (3 crédits)

Préalable : FRAN 301, 303 ou l'équivalent. Acquisition des techniques nécessaires à la rédaction. Étude des différents styles de langue écrite par opposition à ceux de la langue parlée. Pratique de l'analyse et du commentaire de texte.

FRAN 315 Correction Phonétique (Niveau avancée) (3 crédits)

Préalable : FRAN 221, 301, 303 ou l'équivalent. Ce cours s'adresse à l'étudiante ou l'étudiant qui peut s'exprimer clairement du point de vue phonétique et qui désire acquérir une performance en prononciation. Le cours est essentiellement axé sur les particularités prosodiques et phonétiques du français. Une importance est également accordée à l'intonation expressive.

FRAN 318 Le français des affaires I (3 crédits)

Préalable : FRAN 306 ou l'équivalent. Ce cours vise la maîtrise des techniques de la correspondance commerciale. L'accent est mis sur la formation de compétences nécessaires à une présentation et à une rédaction soignées des communications d'affaires. Au moyen de documents authentiques et d'exercices d'application on étudie, d'une part, la mise en page de la lettre d'affaires et, d'autre part, le style de la correspondance d'affaires en fonction de diverses circonstances. Le cours familiarise également l'étudiant au vocabulaire spécialisé du domaine des affaires et lui offre l'occasion de consolider et d'approfondir, par des exercices oraux et écrits, ses connaissances de la langue française (grammaire, stylistique, anglicismes).

FRAN 319 Le français des affaires II (3 crédits)

Préalable : FRAN 306 ou l'équivalent. Ce cours vise à faire acquérir à l'étudiante ou l'étudiant l'habileté à rédiger des textes administratifs dans le domaine des affaires. La révision du français (grammaire, stylistique, vocabulaire, anglicismes) fait également partie des objectifs du cours. Par l'étude de documents authentiques et la rédaction de textes administratifs, l'étudiante ou l'étudiant se familiarisera avec l'écriture professionnelle en affaires.

FRAN 320 Le vocabulaire français (3 crédits)

Préalable : FRAN 303 ou l'équivalent. Ce cours propose une présentation méthodique des divers aspects du vocabulaire français. Il comporte quatre parties : introduction générale et présentation des outils bibliographiques; origine et évolution des mots; procédés de création lexicale; variation sémantique. Les travaux prendront la forme d'exercices variés de vocabulaire, d'analyses de textes et de recherches lexicales.

N.B. : Avec le cours FRAN 306, ce cours constituerait une bonne préparation aux cours de langue de niveau 400.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 334 ne peuvent obtenir de crédits pour ce cours.

FRAN 321 Grammaire fonctionnelle du français (3 crédits)

Préalable : FRAN 301 ou 303 ou 306; ou l'équivalent. Ce cours de mise à niveau s'adresse à l'étudiante ou l'étudiant qui, possédant déjà des connaissances approfondies en français, veut développer des automatismes de correction adaptés aux différents types de communication. Axé sur la compréhension et l'expression écrite et orale, il permettra à l'étudiante ou à l'étudiant d'atteindre une meilleure utilisation de la langue française.

FRAN 398 Étude d'un sujet particulier (3 crédits)

Les prélabes de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

• Langue et linguistique françaises

FRAA 400 Introduction à la linguistique française I (3 crédits)

Préalables : FRAN 306 et 321 ou l'équivalent. Ce cours vise à initier l'étudiante ou l'étudiant à l'analyse descriptive de la structure linguistique du français contemporain. Il présente un aperçu des aspects phonémiques, morphosyntaxiques et lexicaux de la langue considérée comme un système. Outre les notions de base sur la linguistique générale, on y aborde les méthodes d'analyse phonétique, phonologique et morphologique du français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 330 ne peuvent obtenir de crédits pour ce cours.

FRAA 401 Introduction à la linguistique française II (3 crédits)

Préalable : FRAA 400 ou l'équivalent. Suite du FRAA 400, ce cours vise à poursuivre l'étude du système linguistique du français contemporain. Outre les notions de base sur la sociolinguistique et la linguistique de l'énonciation, il traite des méthodes d'analyse syntaxique, lexicale et sémantique du français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 331 ne peuvent obtenir de crédits pour ce cours.

FRAA 403 Histoire de la langue française (3 crédits)

Préalables : FRAA 400 ou 401 ou l'équivalent. Ce cours est une initiation à l'histoire interne et à l'histoire externe du français. On étudiera, d'une part, les origines de cette langue et ses transformations au cours des siècles, sur les plans phonétique, orthographique, morphologique, syntaxique, lexical et sémantique et, d'autre part, l'évolution de sa situation dans le monde comme langue maternelle, langue seconde, langue de culture.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 333 ne peuvent obtenir de crédits pour ce cours.

FRAA 404 Histoire de la langue française au Québec (3 crédits)

Préalables : Six crédits parmi FRAN 320, FRAN 321, FRAA 400, FRAA 401, FRAA 403 ou l'équivalent. Aperçu de l'évolution du français au Québec, du XVII^e siècle à nos jours. Étude de la formation du français québécois et des influences internes et externes qu'il a subies au cours du temps. À l'aide de documents provenant d'époques successives, on s'attachera à définir ce qui caractérise les différents états du français parlé et écrit au Québec.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 466 ne peuvent obtenir de crédits pour ce cours.

FRAA 405 Le code oratoire (3 crédits)

Préalables : FRAN 305 et 321 ou l'équivalent. Ce cours avancé de langue s'adresse aux étudiantes et étudiants cherchant à acquérir une habileté à parler en public ou à la développer. Il porte à la fois sur la transmission et la création de discours oraux : étude des caractéristiques de la langue « oratoire »; acquisition des techniques et des moyens linguistiques appropriés pour établir une communication structurée et vivante avec un auditoire; introduction à la rhétorique et création de discours argumentatifs. Les séances de travaux pratiques permettent aux étudiantes et étudiants d'approfondir les techniques enseignées pendant le cours.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 404 ou 405 ou 408 ne peuvent obtenir de crédits pour ce cours.

FRAA 409 Cours libre de traduction (3 crédits)

Préalables : Six crédits parmi FRAN 306, FRAN 321, FRAA 410, FRAA 413; ou autorisation du département. Étude systématique des anglicismes; notions de méthodologie de la traduction; étude de quelques aspects de la stylistique comparée du français et de l'anglais; travaux pratiques de traduction de l'anglais au français.

N.B. : Ce cours est destiné particulièrement, mais non exclusivement, aux étudiantes et étudiants qui ne se spécialisent pas en traduction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 409 ne peuvent obtenir de crédits pour ce cours.

FRAA 410 Grammaire du français en contextes (3 crédits)

Préalable : FRAN 321 ou l'équivalent. Ce cours vise le perfectionnement des connaissances grammaticales et l'acquisition d'une excellente compréhension du fonctionnement de la langue française en tant que système. En analysant des documents de diverses natures, en produisant des textes et en présentant des exposés oraux, l'étudiante et l'étudiant seront amenés à effectuer des choix langagiers adaptés à différents contextes de communication.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 406 ne peuvent obtenir de crédits pour ce cours.

FRAA 411 Écriture assistée par ordinateur (3 crédits)

Préalable : FRAN 321 ou l'équivalent. Ce cours est fondé sur l'intégration des ressources informatiques à la pratique de l'écriture. Il permettra aux étudiantes et étudiants d'acquérir des compétences avancées dans l'utilisation du traitement de texte et d'autres outils de rédaction assistée par ordinateur (logiciels de PAO, correcteurs orthographiques et grammaticaux, aides à la rédaction) nécessaires à leur intégration au marché du travail. Il familiarisera l'étudiante et l'étudiant à la chaîne éditoriale et au travail collaboratif autour d'un document.

FRAA 412 Grammaire de texte (3 crédits)

Préalable : FRAN 321. Ce cours de communication écrite vise l'approfondissement des connaissances de la structuration du texte. L'accent est mis sur l'acquisition des règles spécifiques de la grammaire du texte qui dépassent le cadre d'une grammaire de la phrase. Dans cette perspective seront abordés des éléments tels que la reprise lexicale et pronominale, les articulateurs textuels et le rôle des paragraphes. Différentes organisations textuelles seront également analysées et ce, dans une perspective élargie de communication écrite.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 407 ne peuvent obtenir de crédits pour ce cours.

FRAA 413 *Rédaction I* (3 crédits)

Préalable : FRAN 321 ou l'équivalent. Ce cours est destiné à l'étudiante ou à l'étudiant qui possède déjà une connaissance approfondie de la langue française. Il vise l'apprentissage des exigences méthodologiques propres aux travaux universitaires en abordant l'élaboration d'un plan et d'une bibliographie ainsi que la rédaction de textes informatifs et argumentatifs. Par le biais d'exercices de lecture, de rappels grammaticaux et d'ateliers de rédaction, l'étudiante ou l'étudiant pourra corriger ses lacunes et apprendre à nuancer son expression.

FRAA 420 *Stylistique comparée* (3 crédits)

Préalable : FRAA 412 ou 413. Ce cours portera sur l'analyse des différences stylistiques, syntaxiques et socioculturelles qui régissent les différents types de textes en anglais et en français. Il permettra à l'étudiante ou à l'étudiant de mieux appréhender l'ensemble des rapports qui unissent les faits sociaux, culturels aux structures linguistiques, d'acquérir une expression écrite nuancée dans les divers champs de référence ou domaines de la culture contemporaine et d'être capable de transférer/traduire des procédés stylistiques d'une langue à l'autre.

FRAA 421 *Sémantique française* (3 crédits)

Préalable : FRAA 401. Étude formelle de la signification et de la segmentation du sens en français fondée sur une approche sémiotique de la langue. Les étudiantes et étudiants feront l'apprentissage de méthodes d'analyse leur permettant d'inventorier les effets de sens et de les ordonner en fonction de critères objectifs.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 469 ne peuvent obtenir de crédits pour ce cours.

FRAA 422 *Questions actuelles en linguistique française* (3 crédits)

Préalable : FRAN 321; trois crédits parmi FRAA 400, 401, 403, 404 ou l'équivalent. Ce cours propose l'étude d'un sujet particulier du domaine de la linguistique. Plus précisément, ce cours aborde des questions qui peuvent être rattachées au domaine de l'énonciation, de la sociolinguistique, des politiques linguistiques, du traitement automatique du langage ou d'autres domaines de recherche en linguistique. Des présentations théoriques, des ateliers d'observation ou des exercices d'application permettront à l'étudiante et à l'étudiant de mieux cerner la problématique abordée.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 471 ne peuvent obtenir de crédits pour ce cours.

FRAA 423 *Rédaction II* (3 crédits)

Préalable : FRAA 413 ou l'équivalent. Ce cours vise l'approfondissement des compétences rédactionnelles par l'apprentissage de techniques de recherche documentaire et de synthèse textuelle, et par l'écriture de textes combinant ces techniques comme le compte rendu critique, le dossier ou le texte de vulgarisation.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 403 ne peuvent obtenir de crédits pour ce cours.

FRAA 430 *Stylistique avancée* (3 crédits)

Préalable : FRAA 423 ou autorisation du département. Ce cours vise l'acquisition de procédés et techniques permettant à l'étudiante ou l'étudiant d'améliorer la concision, l'expressivité et la clarté de ses productions écrites. L'analyse de la façon dont l'organisation textuelle, les constituants syntaxiques, les procédés énonciatifs, lexicaux et rhétoriques concourent à modifier et nuancer le sens permettront à l'étudiante ou l'étudiant de rendre ses productions mieux adaptées à un registre, à un type d'écrit et à des visées sémantiques données. Ce cours alternera la présentation des connaissances théoriques avec le travail en atelier d'écriture et les exercices pratiques qui en permettront l'assimilation.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 470 ne peuvent obtenir de crédits pour ce cours.

FRAA 431 *Rédaction professionnelle* (3 crédits)

Préalable : FRAA 413 ou l'équivalent. Ce cours vise l'apprentissage de compétences propres à la rédaction professionnelle. Il aborde les différentes étapes d'élaboration d'un document ainsi que la rédaction de textes variés. Par le biais d'exercices grammaticaux, d'ateliers de rédaction et de travaux inspirés de situations réelles, l'étudiante ou l'étudiant pourra acquérir de l'autonomie dans la production de documents professionnels.

FRAA 432 *Écriture pour le Web* (3 crédits)

Préalables : FRAN 321 ou l'équivalent. Ce cours vise à familiariser l'étudiante ou l'étudiant aux techniques d'écriture pour le web et aux technologies associées à ce média. Il permettra de mieux comprendre ce que l'hypertexte et l'écrit sur support numérique impliquent du point de vue du traitement de l'information et des spécificités linguistiques et ergonomiques. Il vise à initier l'étudiante et l'étudiant à la création et à la traduction de pages et de sites web.

FRAA 440 *Création littéraire I* (3 crédits)

Préalable : FRAN 321 ou l'équivalent. Ce cours vise à sensibiliser l'étudiante ou l'étudiant aux exigences de l'écriture fictionnelle. Par le biais d'ateliers et de travaux d'écriture, il aborde, entre autres, les questions de langage, de rythme, de forme et de pensée qui sous-tendent l'élaboration d'un univers fictionnel, que ce soit dans une nouvelle, un poème, une pièce de théâtre ou un autre genre.

FRAA 441 *Création littéraire II* (3 crédits)

Préalable : FRAA 413 ou 440 ou l'équivalent. Ce cours vise à approfondir les exigences de la création littéraire par le biais de lectures et d'ateliers d'écriture ainsi que par l'élaboration d'un projet individuel.

FRAA 491 *Tutorat en langue, linguistique ou rédaction* (3 crédits)

Préalables : 12 crédits de langue, de linguistique ou de rédaction au niveau « 400 ». Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la rédaction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 491 ne peuvent obtenir de crédits pour ce cours.

FRAA 492 *Tutorat en langue, linguistique ou rédaction* (3 crédits)

Préalables : 12 crédits de langue, de linguistique ou de rédaction au niveau « 400 ». Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la rédaction.

FRAA 493 *Projet de rédaction* (3 crédits)

Préalables : FRAA 430 et autorisation du département. Ce cours n'est ouvert qu'aux étudiantes et étudiants de la majeure en rédaction professionnelle. Il offre l'occasion d'approfondir un aspect particulier du domaine de la rédaction en permettant à l'étudiante ou l'étudiant de présenter un projet individuel en accord avec une professeure ou un professeur du département qui supervisera son travail tout au long de la session.

FRAA 498 *Étude avancée d'un sujet particulier* (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi le même sujet sous le numéro FRAN 498 ne peuvent obtenir de crédits pour ce cours.

Littérature

FLIT 220 *Introduction aux textes littéraires* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Introduction à la lecture critique et aux caractéristiques des différents genres littéraires au moyen d'un choix de nouvelles, romans, pièces de théâtre, essais et poèmes de la francophonie.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 220 ne peuvent obtenir de crédits pour ce cours.

N.B. : Ce cours est réservé aux étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français.

FLIT 230 *Introduction aux cultures de la francophonie* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Introduction aux diverses cultures de la francophonie et à leurs spécificités historiques, sociales et linguistiques.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 230 ou FRAN 270 ne peuvent obtenir de crédits pour ce cours.

N.B. : Ce cours est réservé aux étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français.

FLIT 240 *Introduction aux littératures de la francophonie* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Étude des littératures de la francophonie, lecture d'œuvres représentatives de leur diversité.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 240 ou FRAN 271 ne peuvent obtenir de crédits pour ce cours.

N.B. : Ce cours est réservé aux étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français.

FLIT 250 *Cultures populaires* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Étude comparée de la culture populaire dans les pays de la francophonie des années 1960 à nos jours : événements historiques, littérature, presse, mode, chanson, télévision, cinéma, publicité.

N.B. : Ce cours est réservé aux étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français.

FLIT 280 *Introduction aux études littéraires* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Initiation aux études littéraires et notions et formation à l'analyse des œuvres.

Apprentissage et formation aux approches, aux notions et aux outils qui permettent de développer l'appréciation des faits textuels en une démarche qui mène à mieux lire et comprendre les œuvres.

N.B. : Ce cours est réservé aux étudiantes et étudiants ayant effectué leurs études secondaires dans une langue autre que le français.

FLIT 298 *Étude d'un sujet particulier* (3 crédits)

Préalable : FRAN 213 ou 215 ou l'équivalent. Les sujets particuliers qui sont étudiés sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 298 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FLIT 300 *Littérature et culture françaises du Moyen Âge au XVII^e siècle* (3 crédits)

Aperçu général de la littérature française du Moyen Âge, de la Renaissance et du XVII^e siècle et du contexte historique, social et culturel qui a donné naissance aux œuvres de l'époque.

FLIT 302 Littérature et culture françaises du XVIII^e siècle à aujourd'hui (3 crédits)

Aperçu général de la littérature française du XVIII^e siècle à aujourd'hui et du contexte historique, social et culturel qui a donné naissance aux œuvres de ces diverses époques.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 322 ne peuvent obtenir de crédits pour ce cours.

FLIT 303 Littérature et culture québécoises de 1534 à 1900 (3 crédits)

Panorama de la littérature québécoise, de la Nouvelle-France à la fin du XIX^e siècle, vue dans une perspective socio-historique. Par l'étude de textes significatifs, on retracera le processus historique de différenciation et d'affirmation collective des Québécoises et Québécois.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 251 ou 252 ne peuvent obtenir de crédits pour ce cours.

FLIT 305 Littérature et culture québécoises de 1900 à aujourd'hui (3 crédits)

Panorama de la littérature québécoise du début du XX^e siècle à aujourd'hui vue dans une perspective socio-historique. Étude des grandes étapes de la production littéraire avec, comme toile de fond, un aperçu général de l'histoire politique, économique, sociale et culturelle du Québec. Étude des principaux courants de pensée.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 251 ou 253 ne peuvent obtenir de crédits pour ce cours.

FLIT 308 Littératures et cultures de la Francophonie (3 crédits)

Étude de la culture de pays francophones (principalement de l'Afrique, des Antilles ou d'autres pays entièrement ou partiellement francophones). Ce cours a pour but, au moyen de documents imprimés et audio-visuels, de faire connaître les conditions socio-politiques de ces pays plutôt que l'histoire des faits exceptionnels.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 364 ne peuvent obtenir de crédits pour ce cours.

FLIT 310 Le Moyen Âge (3 crédits)

Introduction à la lecture des premières œuvres de la littérature française : chansons de geste, lais, romans, poésie, théâtre, fabliaux et nouvelles, chroniques et écrits didactiques. Présentation de leur contexte culturel : le monde féodal et la société urbaine, la culture savante et la culture populaire, les milieux intellectuels et artistiques.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 420 ne peuvent obtenir de crédits pour ce cours.

FLIT 312 La Renaissance (3 crédits)

Étude des mythes, des valeurs, des symboles qui structurent le monde mental des « acteurs » de la Renaissance française.

Les cercles et les foyers de rayonnement intellectuel notables (la Cour, Lyon, les collèges) sont étudiés en détail.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 425 ne peuvent obtenir de crédits pour ce cours.

FLIT 314 Le XVII^e siècle (3 crédits)

Étude de la littérature du XVII^e siècle (baroque et classicisme) et de ses principales thématiques, à travers des œuvres de divers genres, notamment dramatique, romanesque et poétique.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 429 ne peuvent obtenir de crédits pour ce cours.

FLIT 316 Lumières en France (3 crédits)

Analyse de l'émergence d'un pouvoir intellectuel de plus en plus autonome en France au XVIII^e siècle, par rapport à l'Église, par rapport à l'État. Étude du cadre historique et littéraire dans lequel s'est formée et affirmée la philosophie des Lumières.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 432 ne peuvent obtenir de crédits pour ce cours.

FLIT 318 Le XIX^e siècle I (3 crédits)

Étude des principaux courants de la littérature de la première moitié du XIX^e siècle (romantisme, réalisme) et de leurs principales thématiques telles que les transformations sociales, historiques, politiques et économiques.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 418 ou FRAN 440 ne peuvent obtenir de crédits pour ce cours.

FLIT 319 Le XIX^e siècle II (3 crédits)

Étude des principaux courants de la littérature de la seconde moitié du XIX^e siècle (réalisme, naturalisme, Parnasse, décadence et symbolisme) et de leurs principales thématiques telles que le progrès, la science, les débats politiques, le rôle des femmes et le salut de la littérature.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 420 ne peuvent obtenir de crédits pour ce cours.

FLIT 320 Le XX^e siècle I (3 crédits)

Aperçu de la littérature française de la première moitié du XX^e siècle, une période marquée par une remise en question du roman réaliste, une succession tapageuse d'avant-gardes esthétiques et un désir de témoigner des angoisses existentielles suscitées par les bouleversements majeurs qui agitent l'Europe.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 422 ou FRAN 446 ne peuvent obtenir de crédits pour ce cours.

FLIT 321 Le XX^e siècle II (3 crédits)

Aperçu de la littérature française de l'après-guerre à aujourd'hui, une période marquée par un désenchantement croissant face aux « grands récits » historiques, une reconfiguration ludique des genres et des structures ainsi qu'une volonté de décloisonnement et de métissage (légitimation des paralittératures, émergence de revendications identitaires, ouverture à la littérature migrante et mondiale).

N.B. : Il n'est pas nécessaire d'avoir suivi le FLIT 320 pour s'inscrire à ce cours.

FLIT 341 *Le roman québécois jusqu'en 1960* (3 crédits)

La pratique romanesque de 1900 à 1960 dans la réalité socio-politique et culturelle. Du roman de la fidélité au roman de l'interrogation, en passant par le roman d'observation, le roman de la critique sociale et le roman de l'exploration intérieure. (Re)lecture des œuvres marquantes dont plusieurs, grâce à la radio, au cinéma et à la télévision, ont joué un rôle important dans la formation de l'imaginaire québécois.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 352 ne peuvent obtenir de crédits pour ce cours.

FLIT 343 *Le roman québécois contemporain* (3 crédits)

La pratique romanesque depuis la Révolution tranquille : évolutions et orientations. On insistera sur les aspects suivants : rupture, modernité et post-modernité; poétique et politique; diversité des pratiques : des recherches formelles aux « belles histoires »; éclatement de l'espace fictionnel, sous la poussée notamment des écritures de femmes et des écritures (im)migrantes. La lecture de textes marquants sera proposée aux étudiants et étudiantes.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 353 ne peuvent obtenir de crédits pour ce cours.

FLIT 345 *Littérature québécoise depuis 1980* (3 crédits)

Étude des évolutions et des orientations de la production littéraire québécoise depuis les années 1980 à travers l'analyse d'œuvres de différents genres (roman, théâtre, poésie, essai).

FLIT 349 *L'essai au Québec* (3 crédits)

Étude des grands thèmes et de l'évolution des formes de la pensée québécoise à travers l'essai. Analyse des regards pluriels portés sur la culture, la politique. Évaluation de ces composantes mouvantes dans la configuration de la société québécoise actuelle. Lecture d'œuvres représentatives.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 358 ne peuvent obtenir de crédits pour ce cours.

FLIT 351 *Le théâtre québécois* (3 crédits)

Évolution du théâtre québécois, théories et pratiques. Identification et étude des principaux axes de son développement. Situation du théâtre dans le réseau des discours esthétiques et socio-culturels. Étude de pièces et de dramaturges marquants.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 345 ou 347 ne peuvent obtenir de crédits pour ce cours.

FLIT 360 *Littérature de la francophonie au féminin* (3 crédits)

Introduction à l'écriture des femmes francophones, principalement d'Afrique et des Caraïbes ou d'autres pays entièrement ou partiellement francophones. Analyse du regard particulier qu'elles posent sur elles-mêmes et sur la société. Étude des rapports qu'elles entretiennent avec le français (langue maternelle, langue d'usage, langue imposée...). Évaluation de l'apport spécifique de ces femmes à la littérature de leur pays.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 360 ne peuvent obtenir de crédits pour ce cours.

FLIT 362 *Littérature maghrébine* (3 crédits)

Histoire de la littérature marocaine, algérienne et tunisienne écrite directement en français par des écrivains d'origine arabe ou berbère. Marquée par les influences combinées de la culture française et de l'Islam, cette littérature sera étudiée dans son développement et sa spécificité. Lecture et analyse d'œuvres marquantes datant de l'époque coloniale jusqu'à nos jours.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 256 ne peuvent obtenir de crédits pour ce cours.

FLIT 364 *Littératures africaine et antillaise* (3 crédits)

Histoire et développement de la littérature de langue française des Antilles et d'Afrique subsaharienne au XX^e siècle. Issue de l'époque coloniale, cette littérature sera étudiée en fonction de la grande mutation des années soixante et de la problématique géopolitique des années qui ont suivi les indépendances. Lecture et analyse d'œuvres marquantes provenant de divers pays membres de la francophonie.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 257 ne peuvent obtenir de crédits pour ce cours.

FLIT 382 *Le monde du cinéma français* (3 crédits)

Ce cours, abondamment illustré de films ou d'extraits de films, étudie à la fois la relation qui s'est établie, depuis plus de cent ans, entre le cinéma français et les cultures de langue française, et l'impact de ce cinéma sur celle-ci. Ce cours analyse aussi les différences, similitudes, points de tension et de rencontre entre ce cinéma et les autres cinémas nationaux.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 373 ou 374 ne peuvent obtenir de crédits pour ce cours.

FLIT 398 *Étude d'un sujet particulier* (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 398 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FLIT 424 *La littérature française actuelle* (3 crédits)

Aperçu de la littérature française des trente dernières années, marquée par plusieurs phénomènes, dont la reconfiguration des genres et des structures, la post-modernité, l'écriture au féminin, la revendication de la différence, la réhabilitation du « polar », la remise en question de la théorie et l'émergence d'une multi-culture qui témoigne des phénomènes migratoires inhérents au « village global ».

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 448 ne peuvent obtenir de crédits pour ce cours.

FLIT 443 *La poésie québécoise* (3 crédits)

Histoire de la poésie de langue française au Québec, des origines à nos jours. Étude des mouvements et des formes à travers le temps, et lecture des œuvres les plus significatives. On insistera sur l'émergence progressive de la modernité et sur la spécificité des thèmes du répertoire poétique québécois, au confluent de l'histoire et des bouleversements sociaux.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 354 ou 355 ne peuvent obtenir de crédits pour ce cours.

FLIT 446 *Littératures populaires* (3 crédits)

Ce cours propose l'étude des littératures populaires d'expression française à travers l'analyse des thématiques, des structures et des modalités de réception.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 445 ne peuvent obtenir de crédits pour ce cours.

FLIT 447 *Les Voix de Montréal* (3 crédits)

À travers des textes d'écrivaines et d'écrivains montréalais, on cherchera à rendre compte de la dimension plurielle de l'écriture et de la culture québécoises. On privilégiera les parcours transculturels des auteures et auteurs venus d'un ailleurs géographique et culturel, mais qui inscrivent leurs différences dans le texte québécois par la publication ou la traduction de leurs œuvres en français.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 460 ne peuvent obtenir de crédits pour ce cours.

FLIT 449 *Littérature québécoise – Canadian Literature* (3 crédits)

Étude comparée des littératures québécoise et canadienne-anglaise. Analyse thématique, idéologique et stylistique. Examen des similitudes, des analogies et des traits distinctifs. Textes choisis à la fois parmi les œuvres traditionnelles et les œuvres contemporaines.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 455 ou 456 ne peuvent obtenir de crédits pour ce cours.

FLIT 451 *Imaginaires, mythes et symboles* (3 crédits)

Ce cours décrit et analyse l'évolution de grands symboles et archétypes de l'imaginaire des littératures d'expression française.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 441 ne peuvent obtenir de crédits pour ce cours.

FLIT 452 *Littérature pour la jeunesse* (3 crédits)

Évolution de la littérature produite ou adaptée pour la jeunesse, du XVII^e siècle à aujourd'hui. Son état actuel, rapports avec la littérature générale : aspects éthiques, esthétiques et didactiques. Étude approfondie d'œuvres marquantes de la francophonie, particulièrement au Québec.

FLIT 454 *Histoire du livre et de l'édition* (3 crédits)

Introduction à l'histoire du livre, du manuscrit au numérique. Le livre sera situé dans son contexte culturel, social et économique et on observera l'évolution des conditions de production et de diffusion. Différentes questions pourront être abordées, parmi lesquelles les métiers du livre, les rapports entre éditeur et auteur, l'édition au Québec et au Canada.

FLIT 456 *Textes et résonances médiatiques* (3 crédits)

Étude de la relation entre le texte et ses dimensions médiatiques en abordant une ou plusieurs périodes historiques ainsi qu'une thématique particulière (relations aux images, supports, médias, hypertexte, etc.). Analyse des rapports entre l'écrit et sa diffusion en posant la question de la relation de l'un à l'autre, de leur influence mutuelle et des transformations qui résultent de leur enchevêtrement.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 380 ne peuvent obtenir de crédits pour ce cours.

FLIT 462 *Littératures coloniales et postcoloniales* (3 crédits)

Analyse de textes clés publiés au cours du XIX^e et du XX^e siècle, en contexte colonial français, mais aussi à la lumière du courant postcolonial, et de textes publiés de la fin de l'empire colonial français à nos jours, ouvrant à des réflexions sur la tradition anti-impérialiste, les subaltern studies et une lecture de la mondialisation.

FLIT 464 *Littératures mondiales contemporaines* (3 crédits)

Étude de quelques textes littéraires fondamentaux (d'expression française ou en traduction) qui sous-tendent les interrogations contemporaines.

FLIT 466 *Littératures des Amériques* (3 crédits)

Ce cours étudie des textes littéraires francophones ou en version française des Amériques (Québec, Canada, États-Unis, Caraïbes, Amérique latine) et analyse des représentations, interactions, hybridations et évolutions de ces littératures.

FLIT 471 *La littérature québécoise au féminin* (3 crédits)

Étude des principales écrivaines québécoises et de l'évolution de la conscience féminine. Analyse de la représentation qu'elles font d'elles-mêmes et du monde, de leurs modes d'expression et de l'influence du féminisme sur le littéraire. Textes choisis dans l'ensemble de la production des femmes, avec une attention particulière à l'écriture des jeunes écrivaines.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 451 ne peuvent obtenir de crédits pour ce cours.

FLIT 472 *La littérature française au féminin* (3 crédits)

Études d'œuvres de la littérature française au féminin. Analyse de la représentation que les écrivaines font d'elles-mêmes et du monde, de leurs modes d'expression et de l'influence du féminisme sur le littéraire.

N.B. : Les étudiantes et étudiants qui ont suivi FLIT 474 ou FRAN 476 ne peuvent obtenir de crédits pour ce cours.

FLIT 475 Idées sur le monde contemporain (3 crédits)

Étude de textes de théoriciens et essayistes francophones reconnus dont les travaux et la pensée ont marqué la critique littéraire contemporaine.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 479 ne peuvent obtenir de crédits pour ce cours.

FLIT 477 Corpus contemporains (3 crédits)

Étude d'œuvres de langue française et de pratiques actuelles qui explorent divers aspects du texte littéraire : formes d'écriture, supports autres que le livre, modalités d'interaction, statuts de l'auteur et du texte.

FLIT 494 Tutorat en littérature (3 crédits)

Préalables : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 494 ne peuvent obtenir de crédits pour ce cours.

FLIT 495 Tutorat en littérature (3 crédits)

Préalables : 12 crédits en littérature et autorisation du département. Étude d'un sujet particulier dans le domaine de la littérature.

N.B. : Toute étudiante et tout étudiant s'inscrivant pour la seconde fois au cours FLIT 494 obtient les crédits FLIT 495.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 495 ne peuvent obtenir de crédits pour ce cours.

FLIT 496 Recherche dirigée (6 crédits)

Préalables : 12 crédits dans la spécialité et autorisation du département. Ce cours n'est ouvert qu'aux étudiantes et étudiants des programmes de majeure, de spécialisation ou d'honneurs. Il offre l'occasion d'approfondir l'étude d'un sujet à déterminer par l'étudiante ou l'étudiant en accord avec sa conseillère ou son conseiller et/ou une professeure ou un professeur du département. Chaque étudiante et étudiant exécute des travaux individuels sous le contrôle de la professeure ou du professeur spécialiste de la matière.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 496 ne peuvent obtenir de crédits pour ce cours.

FLIT 498 Étude d'un sujet particulier (3 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours FRAN 498 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

Traduction**FTRA 200 Méthodologie de la traduction** (3 crédits)

Préalables : ENGL 207 et FRAN 306 ou équivalent. Ce cours a pour but d'initier l'étudiante et l'étudiant aux problèmes de la traduction. Il sera une introduction générale aux différentes approches du texte à traduire : analyse du discours, grammaire contrastive, stylistique comparée, terminologie et recherche documentaire.

N.B. : Ce cours comporte plusieurs sections, les unes réservées aux étudiantes et étudiants de l'option française, les autres à celles et ceux de l'option anglaise.

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 200 ne peuvent obtenir de crédits pour ce cours.

FTRA 201 Traduction générale du français à l'anglais I (3 crédits)

Préalable : FTRA 200. Traduction du français à l'anglais de textes généraux et analyse des problèmes liés au transfert linguistique. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 202 Traduction générale de l'anglais au français I (3 crédits)

Préalable : FTRA 200. Traduction de l'anglais au français de textes généraux et analyse des problèmes liés au transfert linguistique. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 201 ou 202 ne peuvent obtenir de crédits pour ce cours.

FTRA 203 L'anglais en contact avec le français au Québec (3 crédits)

Ce cours s'adresse aux étudiantes et étudiants anglophones en traduction, langue, littérature et rédaction. Il les sensibilisera aux problèmes liés au contact de l'anglais avec le français au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 204 Le français en contact avec l'anglais au Québec (3 crédits)

Ce cours s'adresse aux étudiantes et étudiants francophones en traduction, langue, littérature et rédaction. Il les sensibilisera aux problèmes liés au contact du français avec l'anglais au Québec et leur permettra de corriger leurs propres erreurs de façon systématique. Le cours est axé sur la langue écrite et on travaillera uniquement sur des textes journalistiques.

FTRA 207 Traduction générale du français à l'anglais II (3 crédits)

Préalable : FTRA 200. Ce cours s'adresse aux étudiantes et étudiants anglophones et porte sur la traduction du français à l'anglais de textes généraux, et sur l'analyse des problèmes liés au transfert linguistique. (A)

FTRA 208 Traduction générale de l'anglais au français II (3 crédits)

Préalable : FTRA 200. Ce cours s'adresse aux étudiantes et étudiants francophones et porte sur la traduction de l'anglais au français de textes généraux, et sur l'analyse des problèmes liés au transfert linguistique. (F)

FTRA 298 Étude d'un sujet particulier (3 crédits)

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 298 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 299 Étude d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 299 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 301 Traduction littéraire du français à l'anglais (3 crédits)

Préalable : FTRA 201. Sensibilisation aux problèmes spécifiques à la traduction littéraire. Travaux pratiques : traduction de textes de genres variés. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 301 ou 302 ne peuvent obtenir de crédits pour ce cours.

FTRA 304 Traduction littéraire de l'anglais au français (3 crédits)

Préalable : FTRA 202. Sensibilisation aux problèmes spécifiques à la traduction littéraire. Travaux pratiques : traduction de textes de genres variés. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 303 ou 304 ne peuvent obtenir de crédits pour ce cours.

FTRA 305 Initiation à la traduction économique du français à l'anglais (3 crédits)

Préalable : FTRA 207. Sensibilisation aux problèmes que pose dans le domaine de l'économie la traduction du français à l'anglais. (A)

FTRA 306 Initiation à la traduction économique de l'anglais au français (3 crédits)

Préalable : FTRA 208. Sensibilisation aux problèmes que pose dans le domaine de l'économie la traduction de l'anglais au français. (F)

FTRA 310 Initiation à la recherche documentaire et terminologique (3 crédits)

Préalable : FTRA 201 ou 202. Le cours fournit les outils permettant de repérer les problèmes de terminologie en traduction. Sont traités : les cheminements documentaire et terminologique (terminologie bilingue ou unilingue, langues de spécialités); la création de produits terminographiques (surtout thématiques); l'intervention linguistique et ses modalités (perspective sociolinguistique). (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 310 ne peuvent obtenir de crédits pour ce cours.

FTRA 398 Étude d'un sujet particulier (3 crédits)

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 398 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 399 Étude d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 399 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 401 Traduction littéraire avancée : du français à l'anglais (3 crédits)

Préalable : FTRA 301. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques : analyse critique et comparaison de traductions et de leur original; traduction de textes français. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 401 ne peuvent obtenir de crédits pour ce cours.

FTRA 402 Traduction littéraire avancée : de l'anglais au français (3 crédits)

Préalable : FTRA 304. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques : analyse critique et comparaison de traductions et de leur original; traduction de textes anglais. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 402 ne peuvent obtenir de crédits pour ce cours.

FTRA 403 Traduction scientifique et technique du français à l'anglais (3 crédits)

Préalable : FTRA 201. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (français-anglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 403 ne peuvent obtenir de crédits pour ce cours.

FTRA 404 Traduction scientifique et technique de l'anglais au français (3 crédits)

Préalable : FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités scientifiques et techniques (anglais-français). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 404 ne peuvent obtenir de crédits pour ce cours.

FTRA 405 Traduction commerciale et juridique du français à l'anglais (3 crédits)

Préalable : FTRA 201. Initiation aux différents problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (français-anglais). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé en traduction. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 405 ne peuvent obtenir de crédits pour ce cours.

FTRA 406 Traduction commerciale et juridique de l'anglais au français (3 crédits)

Préalable : FTRA 202. Initiation aux différents problèmes de la traduction dans les langues de spécialités de l'administration, du commerce et du droit (anglais-français). Le cours est divisé en plusieurs parties, chaque partie correspondant à un domaine spécialisé. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 406 ne peuvent obtenir de crédits pour ce cours.

FTRA 408 Adaptation publicitaire (3 crédits)

Préalable : FTRA 201 ou 202. Initiation à l'adaptation de textes publicitaires. À partir d'exemples empruntés à la publicité écrite, radiophonique ou télévisée, les étudiantes et étudiants seront amenés à se familiariser avec les problèmes linguistiques, affectifs et sociaux soulevés par le travail d'adaptation. (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 408 ne peuvent obtenir de crédits pour ce cours.

FTRA 409 Révision et correction en traduction (3 crédits)

Préalable : FTRA 301 ou 305. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en anglais; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseur et réviseuse; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 410 Révision et correction en traduction (3 crédits)

Préalable : FTRA 304 ou 306. Ce cours abordera les différentes méthodes de révision et de correction de textes rédigés ou traduits en français; il sensibilisera les étudiantes et étudiants aux aspects humains et techniques du métier de réviseur et réviseuse; on touchera aussi aux problèmes de l'évaluation de la qualité des traductions. (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 409 ou 410 ne peuvent obtenir de crédits pour ce cours.

FTRA 411 Terminologie et mondialisation (3 crédits)

Préalable : FTRA 310. Le cours porte sur certains points fins en terminologie et en terminographie modernes : synonymie, marques sociolinguistiques, néonymie, normalisation et internationalisation. Il traite spécifiquement du rôle de la terminologie dans la gestion de l'information unilingue et multilingue dans les entreprises et dans les organismes nationaux et internationaux. L'aspect pratique prend, entre autres, la forme de rédaction de rapports de recherche et l'utilisation d'outils terminologiques. (F/A)

FTRA 412 Théories de la traduction (3 crédits)

Préalable : FTRA 301 ou 304 ou 305 ou 306. Ce cours est une initiation aux différentes théories actuelles de la traduction. Est examiné l'apport de secteurs disciplinaires clés tels que la linguistique, la sémiotique, la sociocritique, dans le développement de la traductologie moderne. (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 412 ne peuvent obtenir de crédits pour ce cours.

FTRA 414 Histoire de la traduction (3 crédits)

Préalable : FTRA 301 ou 304 ou 305 ou 306. Cours d'initiation à l'histoire de la traduction où sont traités les grands courants de la traduction depuis l'Antiquité classique. Sera également abordée la traduction dans certaines sociétés non occidentales. On procèdera par thèmes et par aires géographiques en mettant l'accent sur les époques clés de grands changements politiques et culturels. (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 414 ne peuvent obtenir de crédits pour ce cours.

FTRA 416 Informatique et traduction (3 crédits)

Préalables : FTRA 201 ou 202, et connaissance du traitement de textes. Ce cours porte sur la langue de l'informatique, la théorie et les concepts fondamentaux qui s'y rapportent. Il comporte des exercices de traduction, et une initiation aux outils informatisés pour les traducteurs : Internet, bases de données, systèmes de traduction assistée, utilitaires. (F/A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 416 ne peuvent obtenir de crédits pour ce cours.

FTRA 418 Web, technologies, traduction : théories et critiques (3 crédits)

Préalable : FTRA 412 ou 414. Ce cours porte sur la réflexion théorique et épistémologique des pratiques contemporaines issues du contexte de la mondialisation par rapport aux technologies, au Web multilingue et à la traduction. Sont examinés les aspects et les enjeux culturels, sociaux, linguistiques, scientifiques, techniques, philosophiques, institutionnels, politiques et idéologiques. Le cours comporte des discussions hebdomadaires et un travail approfondi de recherche sur l'analyse des courants actuels des technologies et du Web en mettant l'accent sur la traduction et la communication mondiale.

N.B. : Les étudiantes et étudiants qui ont suivi le même sujet sous le numéro FTRA 498 ne peuvent obtenir de crédits pour ce cours.

FTRA 420 Stage de formation : de l'anglais au français (6 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (F)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 420 ne peuvent obtenir de crédits pour ce cours.

FTRA 421 Stage de formation : du français à l'anglais (6 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et tous les candidats.) (A)

N.B. : Les étudiantes et étudiants qui ont suivi TRAD 421 ne peuvent obtenir de crédits pour ce cours.

FTRA 422 Stage de formation : de l'anglais au français I (3 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (F)

FTRA 423 Stage de formation : du français à l'anglais I (3 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

TRA 424 Stage de formation : de l'anglais au français II (3 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (F)

FTRA 425 Stage de formation : du français à l'anglais II (3 crédits)

Préalables : 60 crédits en traduction et autorisation de la coordinatrice ou du coordinateur des stages. Le stage a pour but d'initier l'étudiante ou l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail. (Le département fera tout son possible pour faciliter l'obtention d'un stage mais ne peut s'engager à trouver un stage pour toutes les candidates et candidats.) (A)

FTRA 452 Traduction automatique (TA) et traduction assistée par ordinateur (TAO) (3 crédits)

Préalables : FTRA 416. Ce cours permet d'analyser les aspects morphologiques, lexicaux, syntaxiques et sémantiques des systèmes de traduction automatisée. L'étudiante et l'étudiant apprennent à appliquer les concepts analysés à un système commercialisé. Ils évaluent des traductions machine, font des exercices simples de programmation portant sur des problèmes linguistiques; ils appliquent des outils de gestion et de traduction au matériel à localiser à l'aide de logiciels de localisation, de logiciels de terminologie, et de mémoires de traduction.

FTRA 455 Gestion de projets (3 crédits)

Préalables : 12 crédits FTRA. Ce cours traite de la gestion des projets de traduction/localisation multilingues, depuis la rédaction de l'offre de services, jusqu'au contrôle de la qualité et la livraison, en passant par la résolution de problèmes et la gestion en situation de crise. Il comprend une partie théorique et des mises en situation. Les étudiantes et étudiants se familiarisent avec l'évaluation des ressources (humaines et matérielles) nécessaires pour exécuter le travail, l'élaboration d'échéanciers et le suivi d'un budget. Ils apprennent à gérer les ressources affectées aux projets afin de pouvoir respecter le mandat qui leur est confié.

FTRA 458 Pratique de la localisation (3 crédits)

Préalables : 12 crédits FTRA. L'étudiante et l'étudiant étudieront dans ce cours les stratégies de localisation et les processus de localisation : la localisation de logiciels et la localisation de sites web; les acteurs dans les projets de localisation; la situation et le travail du traducteur dans les projets de localisation; les types de fichiers à localiser : ressources, code source, fichiers d'aide, guides imprimés, matériel marketing; les types de logiciels localisés : logiciels système, logiciels de gestion, logiciels client, logiciels multimédia, logiciels web.

FTRA 492 Tutorat en traduction (3 crédits)

Préalables : 12 crédits de traduction au niveau « 400 » et permission du département. Étude d'un sujet particulier dans le domaine de la traduction.

N.B. : Les étudiantes et étudiants qui ont suivi FRAN 492 ne peuvent obtenir de crédits pour ce cours.

FTRA 498 Étude avancée d'un sujet particulier (3 crédits)

N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 498 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

FTRA 499 Étude avancée d'un sujet particulier (6 crédits)

Les préalables de ces cours, ainsi que les sujets particuliers qui y sont étudiés, sont indiqués dans le *Undergraduate Class Schedule*.
N.B. : Les étudiantes et étudiants qui ont suivi un cours TRAD 499 ayant le même contenu ne peuvent obtenir de crédits pour ce cours.

31.120

EXERCISE SCIENCE

Faculty

Chair

RICHARD COURTEMANCHE, PhD *Montr.*, Associate Professor

Professors

ROBERT D. KILGOUR, PhD *Flor.State*

ROBIN N. MICHEL, PhD *Montr.*

Associate Professors

SIMON L. BACON, PhD *Birm.*

RICHARD DEMONT, PhD *Pitt.*

ALAIN LEROUX, PhD *McG.*

DAVID L. PARIS, PhD *Ore.*

Assistant Professors

TRACIE BARNETT, PhD *Montr.*

ANDREAS BERGDAHL, PhD *Lund*

THANH DANG-VU, MD PhD *Liège, Belgium*

PETER J. DARLINGTON, PhD *W.Ont.*

GEOFFREY DOVER, PhD *Flor.*

VÉRONIQUE PÉPIN, PhD *Ariz.State*

SYLVIA SANTOSA, PhD *McG.*

NANCY ST-ONGE, PhD *Montr.*

Lecturer

ROBERT PANENIC, MA *McG.*

Affiliate Professors

ROBERT BOUSHEL, DSc *Boston*

STELLA DASKALOPOULOU, MD, PhD *Athens*

KIM LAVOIE, PhD *C'dia.*

RICHARD POUND, LLD *C'dia.*

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Richard J. Renaud Science Complex, Room: SP 165

514-848-2424, ext. 3327

Department Objectives

The Department of Exercise Science is committed to teaching and research in the areas of exercise, health, and physical activity while emphasizing the fields of athletic therapy and clinical exercise physiology. The curriculum permits students to explore the biomechanical and physiological responses to physical activity of healthy individuals and persons with a variety of pathologies and disabilities. Lectures and laboratories are combined with supervised involvement in research, and community and professional activities. Students are provided with an education which is compatible with obtaining employment in the health and fitness field or continuing their studies in health-related professional or graduate schools.

The BSc Honours, Specialization, and Major programs in Exercise Science provide students with the opportunity to acquire essential knowledge and a strong foundation in the field of exercise science. Students are exposed to a concentrated series of courses that incorporate the application of biological sciences to exercise, physical activity, and health-related areas including athletic therapy and clinical exercise physiology.

The fundamental concepts associated with Clinical Exercise Physiology (CEP) include the adaptation of traditional exercise forms, assessment techniques, and training protocols which address the needs of individuals with a disease or functional disability

(e.g. heart disease, diabetes, neurological disorders). Students entering the field of CEP acquire an appreciation of persons with a disability, their lifestyle, and their exercise possibilities. The form of exercise application ranges from adapted physical activities to competitive sports.

The BSc Specialization in Exercise Science/Athletic Therapy is accredited by the Canadian Athletic Therapists Association (CATA) and is directed toward the preparation of students seeking to become a Certified Athletic Therapist in Canada (CAT[C]). A CAT(C) is devoted to the health care of physically active individuals. The scope of practice of the CATA includes prevention, immediate care, and reconditioning of musculoskeletal injuries. Some of the techniques used to accomplish prevention of injury are postural evaluation, conditioning, and providing prophylactic support. Immediate care and rehabilitation of musculoskeletal injury consist of injury assessment, first aid and emergency care, exercise and modality therapy, and preparing individuals for safe return to physical activity or athletic participation. Student members (certification candidates) of the CATA must fulfill the academic and practical requirements of a program accredited by the CATA in order to enter the CATA certification exam process. The Department of Exercise Science offers one of seven such programs in Canada.

While the major offers core applied-science, health, and fitness courses, the BSc Honours also introduces undergraduate students to research concepts and protocols. The AT and CEP Specializations offer courses providing a theoretical knowledge base in the respective areas of study.

Programs

Students are required to complete the appropriate profile for entry into the Exercise Science programs (see §31.002 — Programs and Admission Requirements — Profile). Students entering the major and specialization programs should refer to §16.3.11 — Academic Performance, and §31.003.1 — WGPA Requirements. Students considering entry into the honours program should refer to §16.2.3 — Concentration Requirements.

Application Procedures

All newly admitted students enter the BSc Major in Exercise Science. Admission to the BSc Honours in Exercise Science, BSc Specialization in Exercise Science/Athletic Therapy or BSc Specialization in Exercise Science/Clinical Exercise Physiology is by internal transfer only. Upon completion of a specified list of courses, any student may submit a request for an internal transfer.

Eligibility Requirements for Internal Transfer

To be eligible to transfer from the BSc Major into the BSc Honours program, the following courses must be completed with a minimum GPA of 3.30: EXCI 250, 252, 253, 254, 257 and CATA 262.

To be eligible to transfer from the BSc Major into the BSc Specialization in Exercise Science/Athletic Therapy or the BSc Specialization in Exercise Science/Clinical Exercise Physiology, the following courses must be completed with a minimum GPA of 3.00: EXCI 210, 250, 252, 253, 254, 257; CATA 262 and 263. Due to the limited number of internship site placements in Athletic Therapy and Clinical Exercise Physiology, not all students with a minimum of 3.00 are guaranteed transfer into the specialization.

NOTE: Those students who fail to complete all the required courses for transfer or fail to achieve at least a minimum GPA of 3.30 for the honours program or 3.00 for the specialization program in the first year of study will not be considered for transfer. These students will remain registered in the BSc Major in Exercise Science.

NOTE: Students enrolled in the BSc Specialization in Exercise Science/Athletic Therapy or the BSc Specialization in Exercise Science/Clinical Exercise Physiology must maintain a cumulative GPA of not less than 3.00 calculated for courses required within their program. Any student who is unable to meet this GPA requirement will be removed from his/her program and placed in the BSc Major in Exercise Science.

Internship Eligibility Requirements

To be eligible to register for an internship, students must complete the following internship eligibility requirements specific to each internship course.

To be eligible to register for the Athletic Therapy Field Internship I (CATA 365⁶) the following prerequisite courses must be completed:

BIOL 201³ or equivalent

CATA 262³, 263³

CHEM 205³, 206³ or equivalent

EXCI 250³, 252³, 253³, 254³, 257³

MATH 203³, 205³ or equivalent

PHYS 204³, 224¹ or equivalent

To be eligible for the Athletic Therapy Field Internship II (CATA 485³) the following prerequisite course must be completed:

CATA 365⁶

To be eligible to register for the Athletic Therapy Clinical Internship I (CATA 475⁶) the following prerequisite courses must be completed:

CATA 337³, 339³, 348³, 365⁶

EXCI 351³, 352³, 355³, 357³, 358³

PHYS 205³, 225¹ or equivalent

To be eligible to register for the Athletic Therapy Clinical Internship II (CATA 495³) the following prerequisite courses must be completed:

PHYS 206³, 226¹ or equivalent

EXCI 445³, 451³

CATA 437³, 439³, 475⁶

To be eligible to register for the Clinical Exercise Physiology Internship I (EXCI 383³) the following prerequisite courses must be completed:

BIOL 201³ or equivalent

CATA 262³

CHEM 205³, 206³, or equivalent

EXCI 210³, 250³, 252³, 253³, 254³, 257³, 380³

MATH 203³, 205³ or equivalent

PHYS 204³, 224¹ or equivalent

To be eligible to register for the Clinical Exercise Physiology Internship II (EXCI 483³) the following prerequisite courses must be completed:

EXCI 351³, 352³, 355³, 357³, 358³, 383³, 422³ (previously or concurrently)

PHYS 205³, 225¹ or equivalent

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BSc Honours in Exercise Science

Stage I

18 EXCI 250³, 252³, 253³, 254³, 257³; CATA 262³

Stage II

21 EXCI 322³, 323³, 351³, 352³, 355³, 357³, 358³

Stage III

18 EXCI 420³, 424³, 425³, 426⁶, 445³

3 Chosen from EXCI 440³, 453³, 455³, 458³

NOTE: Students seeking admission to the honours program must apply to the Department Honours Committee normally following the completion of 24 program credits. Students must meet the University regulations concerning the honours degree (§16.2.3).

For additional information concerning programs and courses, students should consult the Department.

96 BSc Specialization in Exercise Science/Athletic Therapy

Stage I

24 CATA 262³, 263³; EXCI 210³, 250³, 252³, 253³, 254³, 257³

Stage II

30 CATA 337³, 339³, 348³, 365⁶; EXCI 351³, 352³, 355³, 357³, 358³

Stage III

18 CATA 437³, 439³, 475⁶; EXCI 445³, 451³

3 Chosen from EXCI 420³, 422³, 423³, 440³, 461³

Stage IV

15 CATA 441³, 462³, 485³, 495³; EXCI 471³

6 Chosen from CATA 447³; EXCI 450³, 455³, 458³, 492³; MANA 300³

66 BSc Specialization in Exercise Science/Clinical Exercise Physiology

Stage I

24 EXCI 210³, 250³, 252³, 253³, 254³, 257³; CATA 262³, 263³

Stage II

21 EXCI 351³, 352³, 355³, 357³, 358³, 380³, 383³

Stage III

18 EXCI 422³, 423³, 445³, 450³, 451³, 483³

3 Chosen from EXCI 420³, 440³, 455³, 458³, 492³

42 BSc Major in Exercise Science

Stage I

18 EXCI 250³, 252³, 253³, 254³, 257³; CATA 262³

Stage II

15 EXCI 351³, 352³, 355³, 357³, 358³

Stage III

6 EXCI 420³, 445³

3 Chosen from EXCI 440³, 450³, 453³, 455³, 458³, 492³

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CATA:

CATA 262 *Emergency Care in Sport and Exercise* (3 credits)

Prerequisite: EXCI 253 previously or concurrently. This course identifies common emergency situations in the athletic environment, and provides theoretical and practical components of management skills to safely deal with these situations. Specific signs and symptoms of basic emergency conditions are discussed. Planning of events to prepare for sport-related emergencies and administration of initial emergency techniques are included. Lectures and laboratory.

NOTE: The Corporation des thérapeutes du sport du Québec (CTSQ) accepts successful completion of this course as equivalent to a first aid course which is a partial requirement towards provincial recognition as a Level I Sport First Aider.

CATA 263 *Principles of Athletic Therapy* (3 credits)

Prerequisite: CATA 262. The course considers topics in athletic therapy from professional, preventive, and pathological perspectives. The course deals with injury classification, clinical flexibility, strength testing, cryotherapy, and sports dermatology. Preventive techniques such as pre-season physical examinations, protective equipment, hazard recognition, and taping techniques are also addressed. Acute and chronic pathologies associated with physical activity, as well as issues including sudden death and communicable diseases in athletics, and the adolescent athlete will be discussed. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 263 or 335 may not take this course for credit.

CATA 337 *Assessment of the Upper and Lower Extremities* (3 credits)

Prerequisite: CATA 263; CATA 339 concurrently; enrolment in the Athletic Therapy Specialization. This course examines normal function of the upper and lower extremities of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Types of surgical procedures are discussed. Lectures and laboratory.

NOTE: Students who have received credit for CATA 338 may not take this course for credit.

CATA 339 *Rehabilitation of the Upper and Lower Extremities* (3 credits)

Prerequisite: CATA 337 concurrently; enrolment in the Athletic Therapy Specialization. This course examines concepts in the rehabilitation process including tissue healing, and introduces students to various exercise protocols and manual techniques specific to the upper and lower extremities. Students learn how to implement safe and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Patient education to facilitate rehabilitation, documentation treatment plans and treatment outcomes are addressed. Lectures and laboratory.

NOTE: Students who have received credit for CATA 338 may not take this course for credit.

CATA 348 *Therapeutic Modalities in Sports Medicine* (3 credits)

Prerequisite: CATA 337, 339; enrolment in the Athletic Therapy Specialization. Students are introduced to the parameters of therapeutic modalities and their physiological effects. Various modalities such as heat, cold, ultrasound, muscle stimulation, interferential current and Transcutaneous Electrical Nerve Stimulation (T.E.N.S.) are examined. For each modality, topics include instrumentation, set-up, and practical application. Basic concepts of manual treatment approaches, such as mobilizations, myofascial release, traction, and massage, are introduced. Indications and contraindications and precautions for all treatments are presented. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 348 or 448 may not take this course for credit.

CATA 365 *Athletic Therapy Field Internship I* (6 credits)

Prerequisite: Enrolment in the Athletic Therapy Specialization and fulfillment of internship eligibility requirements. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Corporation des thérapeutes du sport du Québec (CTSQ). This course involves a commitment of 400 hours over two terms. Weekly seminars with agency supervisors are mandatory.

NOTE: Students who have received credit for CATA 390 may not take this course for credit.

CATA 437 *Assessment of the Hip, Spine and Pelvis* (3 credits)

Prerequisite: CATA 339; CATA 439 concurrently; enrolment in the Athletic Therapy Specialization. This course examines normal function of the hip, spine, and pelvis of the human body. Abnormal function and various pathologies of these structures are addressed in depth. Making use of principles based on applied anatomy and physiology, students learn about clinical assessment procedures and implementation of evaluation methods addressing orthopaedic dysfunction. Surgical procedures are discussed. Lectures and laboratory.

NOTE: Students who have received credit for CATA 438 may not take this course for credit.

CATA 439 *Rehabilitation of the Hip, Spine and Pelvis* (3 credits)

Prerequisite: CATA 437 concurrently; enrolment in the Athletic Therapy Specialization. This course examines concepts in rehabilitation, introducing the students to various exercise protocols and manual techniques specific to hip, spine, and pelvis.

Students learn how to implement advanced, safe, and effective rehabilitation protocols to address orthopaedic dysfunction of these areas. Lectures and laboratory.

NOTE: Students who have received credit for CATA 438 may not take this course for credit.

CATA 441 Concepts in Manual Therapy (3 credits)

Prerequisite: Enrolment in the Athletic Therapy Specialization and completion of 75 university credits. This course provides students with an understanding of the fundamental theory and practical basis for using various manual therapy techniques to keep athletes competition-ready, to help in their recovery from injury, and to improve their performance. The course explains various techniques in detail and describes the procedures involved in conducting effective treatment sessions. Muscle Energy, Active Release, Myofascial Release, and Sports Massage are some of the techniques discussed, demonstrated, and practised. Determining goals and organization of a treatment session, and the choice and application of techniques are also discussed. The goal of the course is to help athletic therapists determine the most appropriate manual therapy techniques for a variety of orthopaedic pathologies. Lectures and laboratory.

CATA 447 Special Topics in Athletic Therapy (3 credits)

Prerequisite: CATA 348; enrolment in the Athletic Therapy Specialization. This course focuses on recent research outcomes and new issues in athletic therapy specific to prevention, assessment, and rehabilitation of athletic injuries. The course content varies within the domains of the Canadian Athletic Therapists Association depending upon the most current issues such as surgical techniques, new medications, advanced assessment and modality techniques, and issues related to professional development and the workplace environment. Information is presented from a variety of courses and disciplines to enhance the knowledge base received from core Athletic Therapy courses. Lectures only.

CATA 462 Advanced Emergency Care (3 credits)

Prerequisite: CATA 262; enrolment in the Athletic Therapy Specialization. This course completes the preparation of Athletic Therapy students in the area of emergency care of sports-related injury. It identifies the less common and more complicated emergency situations experienced in the athletic therapy setting. Advanced theoretical and practical components are presented. This course develops the ability of the student to care for the athlete beyond the initial stages of emergency management and towards advanced life support. Lectures and laboratory.

CATA 475 Athletic Therapy Clinical Internship I (6 credits)

Prerequisite: CATA 365; enrolment in the Athletic Therapy Specialization and fulfillment of internship eligibility requirements. Students must be certification candidates of the Canadian Athletic Therapists Association and the Corporation des thérapeutes du sport du Québec. The course offers a minimum 400-hour supervised work opportunity. Under the supervision of a Certified Athletic Therapist, students are shown basic administrative skills as seen in private rehabilitation clinics or within the Department of Exercise Science.

NOTE: Students who have received credit for CATA 480 may not take this course for credit.

CATA 485 Athletic Therapy Field Internship II (3 credits)

Prerequisite: CATA 475; enrolment in the Athletic Therapy Specialization and fulfillment of internship eligibility requirements. This course offers students the opportunity to work in an emergency or preventive setting with a sports team, although some clinical component may be introduced. Students must be certification candidates of the Canadian Athletic Therapists Association (CATA) and the Corporation des thérapeutes du sport du Québec (CTSQ). This course involves a minimum commitment of 200 hours over one or two terms. Weekly seminars with agency supervisors are mandatory.

NOTE: Students who have received credit for CATA 390 may not take this course for credit.

CATA 495 Athletic Therapy Clinical Internship II (3 credits)

Prerequisite: CATA 475; enrolment in the Athletic Therapy Specialization and fulfillment of the internship eligibility requirements. Students must be certification candidates of the CATA and the CTSQ. The course offers a supervised period of work in a rehabilitation or athletic therapy clinic, for a minimum of 200 hours including a weekly seminar.

NOTE: Students who have received credit for CATA 480 may not take this course for credit.

EXCI:

EXCI 202 The Body Human: Form and Function (3 credits)

This course provides insight into the manner in which common injuries and diseases impact on the anatomical structures and functional systems of the body. The various medical treatments and procedures available to maintain or restore the structural and functional integrity of the body are also addressed. Conditions of a cardiovascular, pulmonary, neuromuscular, metabolic and oncologic nature are discussed.

NOTE: Students who have received credit for this topic under an EXCI 298 or EXCZ 298 number may not take this course for credit.

NOTE: Exercise Science students may not take this course for credit.

EXCI 204 Food for Sport (3 credits)

The course introduces students to a basic understanding of how the digestive system functions, and then examines the role of diet on sport performance. Students learn about the impact of the major food stuffs (carbohydrates, fats, proteins, vitamins, minerals, water) on performance outcomes. The use of ergogenic aids commonly used to enhance sport performance are also discussed with respect to their effectiveness. Caloric balance, diet and body composition are also discussed relevant to specific sport requirements.

NOTE: Students who have received credit for this topic under an EXCI 298 number may not take this course for credit.

NOTE: Exercise Science students may not take this course for credit.

EXCI 206 The Science of Sport (3 credits)

The course introduces basic and practical knowledge of human movement in sports and physical activity. Anatomical and physiological knowledge pertinent to body movement is presented in simple and meaningful terms. Biomechanical concepts and principles applied to body movement in different sports and physical activities are also addressed. Consideration is also given to nutritional aspects and injury prevention in sport and exercise.

NOTE: Students who have received credit for this topic under an EXCI 298 number may not take this course for credit.

NOTE: Exercise Science students may not take this course for credit.

EXCI 210 Introduction to Adapted and Therapeutic Physical Activity (3 credits)

Prerequisite: Enrolment in an Exercise Science program. This course differentiates between adapted and therapeutic approaches to physical activity with respect to their historical development, inherent principles, types of disabilities and disease conditions, demographics and epidemiological data. Lectures only.

EXCI 218 Physical Growth and Maturation (3 credits)

This course considers normal and abnormal growth and maturation patterns of the musculoskeletal, neural, hormonal, cardiovascular, and respiratory systems of the body. In addition, socialization and psychosocial development processes with relevance to an exercise or sports environment are examined. These patterns and processes are investigated from childhood through adolescence and adulthood. Lectures only.

NOTE: Exercise Science students may not take this course for credit.

EXCI 233 Current Issues in Personal and Community Health (3 credits)

This course presents an overview of factors influencing personal and community health. Students are exposed to prevalent physical and mental health issues from biological, psychological, and sociological points of view. Health-related consequences of alcohol abuse, drugs, birth control, sedentary lifestyle, eating disorders, and communicable diseases are among the topics considered. Lectures only.

NOTE: Exercise Science students may not take this course for credit.

EXCI 250 Research Methods (3 credits)

This course provides students with a general overview of investigative research and the nature of scientific inquiry. Students receive instruction in critical inquiry and appraisal, research design, research ethics, and the role research plays in the development of professional practice/skills. Finally, this course provides the necessary knowledge and practical experience to enable students to plan and run an experimental project, including an understanding of the process of data collection, analysis, interpretation, and presentation. Lectures only.

EXCI 251 Fundamentals of Health and Physical Activity (3 credits)

The basic and contemporary issues of health and physical activity are discussed. General topics regarding the benefits of physical activity are examined from anatomical and physiological perspectives. Upon completion, students are able to apply the principles of fitness and wellness to their own lives, to assess their current level of fitness and wellness, to create plans for changing their lifestyle to reach wellness, and to monitor their progress using the health-related components of physical fitness: body composition, cardiovascular endurance, muscular strength and endurance, and flexibility. Lectures only.

NOTE: Students who have received credit for EXCZ 251 may not take this course for credit.

NOTE: Exercise Science students may not take this course for credit.

EXCI 252 Introduction to Physical Activity, Health and Fitness (3 credits)

Prerequisite: Enrolment in an Exercise Science program. This course focuses on the fundamentals of fitness assessment and the design of individualized exercise programs compatible with the responsibilities of a health/fitness instructor. Topics of study include screening clients for fitness testing and physical activity participation; the selection of appropriate tests to assess the health-related components of physical fitness such as body composition, cardiovascular endurance, muscular strength, local muscular endurance, and flexibility; interpretation of test results; and the application of exercise principles in the design of safe and effective individualized exercise prescriptions of the apparently healthy client. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 261 and 342 may not take this course for credit.

EXCI 253 Human Anatomy I: Musculoskeletal Anatomy (3 credits)

Prerequisite: Enrolment in an Exercise Science program. The major focus of this course covers the anatomy of the musculoskeletal system and accompanying (peripheral) circulatory and neurological systems. It also addresses introductory terminology and tissue differentiation. The structures are examined through approaches of surface anatomy, current and traditional media and/or cadaver examination. Lectures and laboratory.

EXCI 254 Human Anatomy II: Systemic Anatomy (3 credits)

Prerequisite: EXCI 253; enrolment in an Exercise Science program. The major focus of this course covers the anatomy of the central circulatory and central respiratory systems. It also addresses the anatomy of the brain and spinal column as well as the integumentary, digestive, and urogenital systems. The structures are examined through approaches of surface anatomy, current and traditional media and cadaver examination. Lectures and laboratory.

EXCI 257 Human Physiology I: The Neurological, Bio-energetic and Endocrine Systems (3 credits)

Prerequisite: EXCI 254 previously or concurrently. This course surveys the functional organization and integration of the major systems of the body. A strong focus is placed on the fundamental control and operation of the nervous system, the mechanics and

energetics of skeletal muscle function, and the actions of hormones comprising the endocrine and reproductive systems. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 353 may not take this course for credit.

EXCI 298 *Selected Topics in Exercise Science* (3 credits)

EXCI 299 *Selected Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 322 *Statistics for Exercise Science* (3 credits)

Prerequisite: EXCI 250; enrolment in the honours program; or permission of the Department. This course builds on students' experience derived from EXCI 250 to advance their knowledge of the research process by providing details of statistical techniques and methods that are common in exercise science. Lectures only.

EXCI 323 *Research Experience in Exercise Science* (3 credits)

Prerequisite: EXCI 250; enrolment in the honours program. This course provides students with hands-on research experience. They learn a new technique, engage in data collection, and produce a literature review in an area related to the research of the supervising professor. Laboratory only.

EXCI 351 *Introduction to the Biomechanics of Human Movement* (3 credits)

Prerequisite: EXCI 253; PHYS 204, 224 or equivalent. The primary focus of this course concentrates on the mechanical principles of human movement. Fundamental principles of kinematics and kinetics are examined in a theoretical and practical context. Lectures and laboratory.

EXCI 352 *Essentials of Exercise Testing and Training in Athletic Populations* (3 credits)

Prerequisite: EXCI 252. This course utilizes the students' background knowledge of anatomy, physiology, biomechanics, exercise physiology, and exercise programming to design pre-season, in-season, and post-season conditioning programs for elite athletes in a variety of sports. Most importantly, this course focuses on the importance of applying scientific principles of training in the design of exercise programs for elite athletes. The importance of skill-related (i.e. speed, agility, and power) and health-related components (i.e. cardio-respiratory endurance, and muscle strength) of physical fitness relative to performance is emphasized in this course. Some of the topics covered include ergogenic aids, regulation of skeletal muscle mass, periodization, aerobic endurance and resistance exercise training, and plyometrics. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 452 may not take this course for credit.

EXCI 355 *Neural Control of Human Movement* (3 credits)

Prerequisite: EXCI 254, 257. Following a brief review of the nervous system anatomy and the functional properties of the neuron, students are introduced to the basic principles of the neural control of human movement, including reference to the sensory systems (visual, auditory, vestibular, proprioceptive and kinesthetic). Select pathologies and disorders of the nervous system and their resulting neuromuscular deficits are presented, as well as neuro-rehabilitative techniques and strategies. Lectures only.

EXCI 357 *Human Physiology II: The Cardiovascular and Respiratory Systems* (3 credits)

Prerequisite: EXCI 257. This course deals with the structural, the fundamental mechanisms and the functional control of the cardiovascular and respiratory systems. A detailed analysis of the rhythmical control of the heart, cardiovascular hemodynamics, capillary and coronary circulations, control of arterial blood pressure, the regulation of heart rate, cardiac output, and the peripheral vasculature is discussed. With respect to respiratory physiology, selected topics including pulmonary mechanics, principles of gas exchange and diffusion, transport of oxygen and carbon dioxide in the blood, and the regulation of respiration are addressed. Lectures and laboratory.

EXCI 358 *Physiology of Exercise* (3 credits)

Prerequisite: EXCI 357. This course deals with the physiological adjustments and adaptations to physical activity. Special emphasis is placed on examining the functional capacity of the cardiovascular, respiratory, neuromuscular, and endocrine systems to acute exercise and the process of adaptation to exercise training. Lectures and laboratory.

NOTE: Students who have received credit for EXCI 456 may not take this course for credit.

EXCI 380 *Adapted Physical Activity* (3 credits)

Prerequisite: EXCI 210; enrolment in the Clinical Exercise Physiology Specialization. This course examines the pathology associated with selected physical impairments and disabilities including sensorial, neurological, and orthopaedic conditions. Appropriate adapted physical activities are presented together with contraindications to physical activity and the role of environmental factors. Students experience clinical environments through field-trip activities. Lectures only.

EXCI 383 *Clinical Exercise Physiology Internship I* (3 credits)

Prerequisite: Enrolment in the Clinical Exercise Physiology Specialization and fulfillment of internship eligibility requirements. This course offers students the opportunity to observe and participate in physical activity programming offered for special populations (i.e. persons with neurological and physical impairments) in a supervised setting. This course involves a commitment of 120 hours including a weekly seminar.

EXCI 398 *Selected Topics in Exercise Science* (3 credits)

EXCI 399 *Selected Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

EXCI 420 *Physical Activity Epidemiology* (3 credits)

Prerequisite: EXCI 358. This course surveys the health-related aspects of exercise, physical activity, and physical fitness from the perspective of epidemiology. Topics include an introduction to the epidemiological process, the relationship between physical activity and disease (e.g. cardiovascular disease, obesity, cancer, mental illness), the biological mechanisms for healthy adaptations to physical activity, the behavioural determinants of physical activity, and public policy implications of the current literature.

NOTE: Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.

EXCI 422 *Pathophysiology in Clinical Exercise Science I* (3 credits)

Prerequisite: EXCI 252, 358 or equivalent; enrolment in the Clinical Exercise Physiology Specialization. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common cardiovascular, respiratory, oncologic and metabolic diseases. Lectures only.

EXCI 423 *Pathophysiology in Clinical Exercise Science II* (3 credits)

Prerequisite: EXCI 252, 358 or equivalent; enrolment in the Clinical Exercise Physiology Specialization. This course reviews pathophysiology, medical intervention techniques, and medication profiles of the most common neuromuscular and orthopaedic diseases and disabilities. Lectures only.

EXCI 424 *Honours Seminar I: Issues and Methods in Exercise Science* (3 credits)

Prerequisite: EXCI 322, 323; enrolment in the honours program. Using a combination of guest speakers and student presentations, this seminar is geared to critically examining current issues and methods in exercise science. Its emphasis is on practical and methodological issues as they relate to selected topics from these areas. Examples of topics include ethical issues and new emerging theories in exercise science, and utility of a particular research technique or methodology. Lectures only.

EXCI 425 *Honours Seminar II: Current Topics in Exercise Science* (3 credits)

Prerequisite: EXCI 322, 323; enrolment in the honours program. Using a combination of guest speakers and student presentations, this seminar is geared to critically examining current topics in exercise science. Its emphasis is on the theoretical basis of issues as they relate to selected topics in the student's specific areas of research. Lectures only.

EXCI 426 *Honours Thesis* (6 credits)

Prerequisite: EXCI 322, 323; EXCI 424, 425 previously or concurrently; enrolment in the honours program. This course requires the student to propose and conduct a study and submit a thesis according to a recognized and approved scientific journal format. The work is supervised by a thesis chair selected by the student from within the Department.

EXCI 440 *Current Developments in the Biochemistry of Exercise* (3 credits)

Prerequisite: EXCI 358 or permission of the Department. This course offers an in-depth examination of the current topics and literature in biochemistry, cellular and molecular biology, and physiology as they relate to the adaptations associated with physical activity, exercise training, or disease. The course is designed to integrate knowledge from the disciplines of Exercise Science, Biochemistry, and Biology, to facilitate the synthesis and evaluation of new ideas, and to promote the effective oral and written communication of these ideas.

NOTE: Students who have received credit for this topic under an EXCI 498 number may not take this course for credit.

EXCI 445 *Nutrition in Exercise and Sport* (3 credits)

Prerequisite: EXCI 358. This course provides an overview of the anatomy and in-depth study of the physiology of the digestive system prior to examining the significance of carbohydrates, lipids, and proteins as essential nutritional requirements for physical activity and optimal performance. The importance of trace minerals and vitamins is also discussed. Specific issues such as the use of nutritional beverages, ergogenic aids, eating disorders, and nutritional concerns of athletes are some of the topics presented. Lectures only.

EXCI 450 *Physical Fitness Assessment, Exercise Prescription and Rehabilitation in Special Populations* (3 credits)

Prerequisite: EXCI 252, 358, 422, 423 previously or concurrently. This course focuses on the assessment of the health-related components of physical fitness in individuals with chronic degenerative diseases. These health-related components include cardiorespiratory endurance, muscular fitness, flexibility, and body composition. Furthermore, students learn how to design safe and effective exercise programs through proper exercise prescription for these same individuals. Cancer, musculoskeletal disorders, and cardiovascular, pulmonary, and metabolic diseases are samples of the degenerative diseases that are examined in this course. Lectures and laboratory.

EXCI 451 *Clinical Biomechanics* (3 credits)

Prerequisite: EXCI 351, 355 previously or concurrently. This course addresses biomechanical aspects of the most common structural and neurological abnormalities of the spine resulting in pathological gait. It also addresses the mechanics of tissue and joint injury of the head, neck, torso, and extremities. Lectures only.

EXCI 453 *Stress, Health and Disease* (3 credits)

Prerequisite: EXCI 355, 357 or permission of the Department. This course is an introduction to the role stress plays in health and disease. Topics dealt with in this seminar-based course include defining and measuring stress, the relationship between stress and disease (e.g. cardiovascular disease, asthma, cancer, infectious illness), the pathophysiology of stress, and current issues and controversies in behavioural medicine.

NOTE: Students who have received credit for EXCI 320 or for this topic under an EXCI 398 number may not take this course for credit.

EXCI 455 *Physical Activity, Health and Aging* (3 credits)

Prerequisite: EXCI 358. This course addresses the health status, physical fitness, exercise patterns, and effectiveness of exercise prescription for the well elderly and those exhibiting symptoms of chronic diseases which commonly accompany the aging process. Lectures and laboratory.

EXCI 458 *Pediatric Exercise Science* (3 credits)

Prerequisite: EXCI 351, 358. This course introduces students to the anatomical, physiological, and psychosocial issues related to exercise and physical activity in children. Topics include influence on growth and health, injury potential, endurance exercise, weight training, youth in sport, competitive and collaborative play, stress in childhood, and the strategies for improving exercise habits of children. Lectures only.

EXCI 461 *Pharmacology for Sport and Exercise* (3 credits)

Prerequisite: EXCI 358. This course provides the latest information on over-the-counter and prescription medications commonly used in sport. It offers a sound review of pharmacology and pharmacokinetic principles and explores the latest practice implications for certified athletic therapists and exercise specialists. The course includes indications, contraindications, and side effects of common therapeutic medications used in sport. Class discussions also cover natural products and the effects of their interactions with prescription and non-prescription pharmaceuticals. Lectures only.

EXCI 471 *Pain Management Strategies* (3 credits)

Prerequisite: EXCI 358. This course relates theory and research to the practical experiences of client/athletic-practitioner interactions, relationships, and interventions. It addresses pain management principles as they relate to illness, injury, and rehabilitation. Lectures only.

EXCI 483 *Clinical Exercise Physiology Internship II* (3 credits)

Prerequisite: Enrolment in the Clinical Exercise Physiology Specialization and fulfillment of internship eligibility requirements. The course offers a supervised period of work as activity leader/exercise specialist in a hospital or rehabilitation centre assisting in performing physiological evaluations, designing exercise programs, and animating physical activities. The course involves a commitment of 120 hours including a weekly seminar.

EXCI 492 *Independent Study in Exercise Science* (3 credits)

Prerequisite: Completion of 60 credits in the Exercise Science Major or Specialization programs and written permission of the Department Chair. This course provides an opportunity to conduct a small-scale scientific research project under the supervision of a faculty member from the Department. In consultation with a faculty member, the student selects a topic, formulates a research methodology, collects data, analyzes the results, and writes a formal research report.

NOTE: Students who have received credit for EXCI 491 may not take this course for credit.

EXCI 498 *Advanced Topics in Exercise Science* (3 credits)

EXCI 499 *Advanced Topics in Exercise Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty

Chair

DAVID F. GREENE, PhD *Calg.*, Professor

Distinguished Professor Emeritus

BRIAN SLACK, PhD *McG.*

Professor

JOHN ZACHARIAS, PhD *Montr.*

Associate Professors

PASCALE BIRON, PhD *Montr.*

PIERRE GAUTHIER, PhD *McG.*

JOCHEN JAEGER, Diplom Dr.Sc.Nat *ETH (Fed.Inst.Tech., Zurich)*

DAMON MATTHEWS, PhD *Vic.B.C.*

MONICA MULRENNAN, PhD *Dub.*

ALAN E. NASH, PhD *Camb.*

JUDITH PATTERSON, PhD *Virginia Poly.Inst.*

NORMA RANTISI, PhD *Tor.*

CRAIG TOWNSEND, PhD *Murd.*

Assistant Professors

SÉBASTIEN CAQUARD, PhD *CRENAM, Jean Monnet St.Etienne*

KEVIN GOULD, PhD *Br.Col.*

ZACHARY PATTERSON, PhD *McG.*

TED RUTLAND, PhD *Br.Col.*

Affiliate Assistant Professors

JAMES FREEMAN, PhD *Calif. (Berkeley)*

WILLIAM KENNEDY, PhD *Freie U., Berlin*

JULIE PODMORE, PhD *McG.*

LAURA SHILLINGTON, PhD *York (Can.)*

UDAYA VEPAKOMMA, PhD *U.Q.A.M.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: H 1255-26

514-848-2424, ext. 2050

Department Objectives

The Department of Geography, Planning and Environment focuses on the processes and practices of human intervention in the natural, cultural, and built environment. Human interventions are examined as cultural and political processes across the spectrum of biophysical settings and human settlements. The Department's aim is to provide a systematic understanding of biogeophysical environmental processes and human-environment interactions as a step towards improving policies, practices, and specific interventions. The curriculum reflects a balance among theoretical, technical, and applied aspects, and promotes environmental and spatial awareness and literacy. The Department aims to train professional geographers, environmental scientists, and urban planners, as well as to produce articulate and informed graduates who are committed to improving the quality and sustainability of the natural, human, and built environment.

Programs

The Department offers honours, specialization, and major programs leading to a BA in Human Environment, a BA in Urban Planning or Urban Studies, and a BSc in Environmental Science or Environmental Geography. Students wishing to follow a BSc must meet the entry profile for that program (see §31.002 — Programs and Admission Requirements — Profiles).

It is strongly recommended that students planning graduate studies follow the appropriate honours or specialization program. Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor during stage two of their program. In addition to meeting the Faculty requirements (see §31.003 Honours Regulations), the Department requires a statement of intent which specifies the proposed topic and supervisor for the Honours Essay (GEOG 491 or URBS 491).

All students in department programs must be advised annually to receive permission to register for courses or to replace, substitute, or be exempted from any course within their program. Urban Studies students should consult the director of Urban Studies; all other program students should consult the Geography undergraduate advisor.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in the Human Environment

Stage I

15 GEOG 220³, 260³, 272³, 274³, 290³

3 Chosen from GEOG 210³; GEOL 210³; URBS 230³

Stage II

12 GEOG 300³, 361³, 362³, 363³

6 Chosen from GEOG 317³, 318³, 330³, 355³

6 Chosen from GEOG 371³, 372³ or 373³, 375³, 377³, 378³

Stage III

12 Elective credits in Geography at the 400 level

6 GEOG 491⁶

60 BA Specialization in the Human Environment

Stage I

15 GEOG 220³, 260³, 272³, 274³, 290³

3 Chosen from GEOG 210³; GEOL 210³; URBS 230³

Stage II

12 GEOG 300³, 361³, 362³, 363³

6 Chosen from GEOG 317³, 318³, 330³, 355³

6 Chosen from GEOG 371³, 372³ or 373³, 375³, 377³, 378³

Stage III

12 Elective credits in Geography at the 400 level

6 Elective credits in Geography at the 300 or 400 level

42 BA Major in the Human Environment

Stage I

15 GEOG 220³, 260³, 272³, 274³, 290³

3 Chosen from GEOG 210³; GEOL 210³; URBS 230³

Stage II

12 GEOG 300³, 361³, 362³, 363³

3 Chosen from GEOG 317³, 318³, 330³, 355³

3 Chosen from GEOG 371³, 372³ or 373³, 375³, 377³, 378³

Stage III

6 Elective credits in Geography at the 400 level

69 BSc Honours in Environmental Science

Stage I

9 BIOL 225³, 226³; GEOG 290³

3 COMP 218³ or 248³

6 Chosen from GEOG 272³, 274³; GEOL 210³

3 GEOG 260³ or GEOL 216³

3 CHEM 212³ or 217³

Stage II

6 BIOL 322³; GEOG 363³

3 Chosen from BIOL 321³; GEOG 355³; GEOL 302³

9 Chosen from GEOG 371³, 372³ or 373³, 375³, 377³, 378³

6 Chosen from BIOL 350³, 351³, 353³, 367³, 381³, 385³; CHEM 271³; CIVI 361^{3.5*}; GEOL 331³; ENGR 251³

Stage III

3 GEOG 463³ or 465³

12 Chosen from BIOL 451³, 457³, 459³; CHEM 375³, 470³, 472³; GEOG 458³, 466³, 467³, 470³, 474³, 475³, 478³, 498^{3**}; GEOL 415³, 440³; CIVI 467³, 468³, 469^{3.5}, 495^{3**}

6 Chosen from BIOL 490⁶; GEOG 491⁶; GEOL 414⁶

**Environmental Science students missing the prerequisites may apply to have all or some of these waived by the Department of Building, Civil and Environmental Engineering.*

***Where the subject matter is of an environmental science nature.*

69 BSc Specialization in Environmental Science

Stage I

- 9 BIOL 225³, 226³; GEOG 290³
- 3 COMP 218³ or 248³
- 6 Chosen from GEOG 272³, 274³; GEOL 210³
- 3 GEOG 260³ or GEOL 216³
- 3 CHEM 212³ or 217³

Stage II

- 6 BIOL 322³; GEOG 363³
- 3 Chosen from BIOL 321³; GEOG 355³; GEOL 302³
- 9 Chosen from GEOG 371³, 372³ or 373³, 375³, 377³, 378³
- 6 Chosen from BIOL 350³, 351³, 353³, 367³, 381³, 385³; CHEM 271³; CIVI 361^{3.5*}; GEOL 331³; ENGR 251³

Stage III

- 3 GEOG 463³ or 465³
- 18 Chosen from BIOL 451³, 457³, 459³; CHEM 375³, 470³, 472³; GEOG 458³, 466³, 467³, 470³, 474³, 475³, 478³, 498^{3**}; GEOL 415³, 440³; CIVI 467³, 468³, 469^{3.5}, 495^{3**}

*Environmental Science students missing the prerequisites may apply to have all or some of these waived by the Department of Building, Civil and Environmental Engineering.

**Where the subject matter is of an environmental science nature.

45 BSc Major in Environmental Geography

Stage I

- 15 GEOG 220³, 260³, 272³, 274³, 290³
- 3 GEOL 210³
- 3 Chosen from BIOL 225³, 226³, 227³

Stages II & III

- 12 GEOG 300³, 361³, 362³, 363³
- 12 300- or 400-level credits chosen from the BSc Geography/Geology course list or in consultation with the appropriate departmental advisor. At least three credits must be at the 400 level.

30 Minor in the Human Environment

- 15 GEOG 220³, 260³, 272³, 274³, 290³
- 3 GEOG 300³
- 12 GEOG elective credits at the 300 or 400 level

NOTE: This minor is intended for Arts students.

24 Minor in Environmental Geography

- 6 GEOG 272³, 274³
- 3 GEOL 210³
- 9 Chosen from GEOG 300³, 363³, 371³, 372³ or 373³, 375³, 377³, 378³; GEOL 302³, 331³
- 6 Chosen from GEOG 406³, 458³, 463³, 466³, 470³, 472³, 474³, 475³, 478³; GEOL 415³, 440³

NOTE: This minor is intended for Science students.

Students in programs leading to the BSc degree may take the courses in Geography/Geology listed below for credits to be applied to their program of concentration.

GEOG 260	Mapping and the Environment (3 credits)
GEOG 272	The Natural Environment: Air and Water (3 credits)
GEOG 274	The Natural Environment: Land and Life (3 credits)
GEOG 361	Research Design and Qualitative Methods (3 credits)
GEOG 362	Statistical Methods (3 credits)
GEOG 363	Geographic Information Systems (3 credits)
GEOG 371	Landscape Ecology (3 credits)
GEOG 372	Plant Reproductive Ecology (3 credits)
GEOG 373	Plant Community Ecology (3 credits)
GEOG 375	Hydrology (3 credits)
GEOG 377	Landform Evolution (3 credits)
GEOG 378	The Climate System (3 credits)
GEOG 458	Environmental Impact Assessment (3 credits)
GEOG 463	Advanced Geographic Information Systems (3 credits)
GEOG 465	Remote Sensing (3 credits)
GEOG 466	Geomedia and the Geoweb (3 credits)
GEOG 470	Environmental Management (3 credits)
GEOG 472	Environmental Change during the Quaternary (3 credits)
GEOG 473	Environment and Health (3 credits)
GEOG 474	Sustainable Forest Management (3 credits)

GEOG 475	Water Resource Management (3 credits)
GEOG 478	Climate Change: Science, Impacts and Policy (3 credits)
GEOL 210	Introduction to the Earth (3 credits)
GEOL 216	Field Methods (3 credits)
GEOL 302	Palaeobiology (3 credits)
GEOL 331	Evolution of the Earth (3 credits)
GEOL 415	Plate Tectonics and Crustal Evolution (3 credits)
GEOL 440	Seminar in Current Research on Environmental Earth Science (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Geography

GEOG 200 *World Geography* (3 credits)

This course provides an overview of world geography. It first examines the main environmental and social factors that geographers have employed to divide the world into a series of distinctive regions, and uses examples of specific countries to explore the distinctive geographical processes by which these patterns are transformed and perpetuated.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 203 *Canadian Environmental Issues* (3 credits)

This course examines the diversity and complexity of Canadian environmental issues from an interdisciplinary perspective. Natural science considerations are explored as well as the relationship of scientific understanding to policy and wider social action. Issues addressed include fisheries, animal rights, biodiversity conservation, protected areas, energy, and climate change.

NOTE: Students registered in a Human Environment, Environmental Geography, or Environmental Science program may not take this course for credit.

GEOG 204 *Global Environmental Issues* (3 credits)

This course examines a number of global environmental issues from an interdisciplinary perspective. The complex interactions and interdependencies among the biophysical, socio-economic, political, and cultural aspects of global environmental change are explored in relation to issues such as global warming, desertification, deforestation, declining biodiversity, and acid rain.

NOTE: Students registered in a Human Environment, Environmental Geography, or Environmental Science program may not take this course for credit.

GEOG 206 *Maps and Mapping* (3 credits)

This course explores the role of maps in society. Students are introduced to basic mapping concepts in order to evaluate the meaning and use of various types of maps. Samples of the following types of maps are studied: historic maps, political maps, cognitive maps, maps in newspapers and magazines, computer-generated maps, and maps on television.

NOTE: Students who have completed courses numbered GEOG 209 and above may not take GEOG 200-208 for credit.

GEOG 209 *The Geography of a Selected Region* (3 credits)

The course includes both a systematic survey as well as an in-depth focus on particular geographical issues and problems. The specific region to be studied may vary from year to year.

GEOG 210 *Geography of Global Change* (3 credits)

This course examines a variety of geographical changes related to globalization. It focuses mainly on the global political system and the global economy, and also considers transport and communications systems, culture, and environmental issues.

NOTE: Students who have received credit for GEOZ 210 may not take this course for credit.

GEOG 220 *The Human Environment: Place, Space, and Identity* (3 credits)

This course examines how geographers construct the meaning of place, the unique identity of places, the contests over identity of place, and how space is socially constructed. The ways in which these have been affected by migration and globalization are then examined within the context of an already constituted social and geographical unevenness (political, economic, environmental, and cultural).

NOTE: Students who have received credit for GEOZ 220 may not take this course for credit.

GEOG 260 *Mapping the Environment* (3 credits)

This course introduces students to the basic concepts, theory, and methods of mapping with reference to topographic and thematic maps. Through lectures, laboratories, and practical assignments, students learn about the sources of data for maps, and how these data are manipulated, represented, and interpreted in both analog and digital form (Geographic Information Systems). Lectures and laboratory.

GEOG 272 *The Natural Environment: Air and Water* (3 credits)

This course introduces the Earth's atmosphere and hydrosphere through an examination of their structural components, processes, and variability through space and time. Topics include the global energy system, air temperature cycles, weather systems, urban climate, the water cycle, oceans, lakes, and rivers.

GEOG 274 *The Natural Environment: Land and Life* (3 credits)

This course introduces the Earth's lithosphere and biosphere through an examination of their structural components, processes, and variability through space and time. Topics include the tectonic system, volcanic activity, landscape and landform development, soils, biogeochemical cycling, succession, and biomes.

GEOG 290 *Environment and Society* (3 credits)

Prerequisite: GEOG 220, 272; 274 concurrently.* This course integrates human and physical geography into a holistic view of human-environment relations. It focuses on a few key environmental issues through case studies operating at a variety of scales (global, national, regional, local), and in different places and time periods. It examines how humans interact with the environment; how they, as members of societies and bearers of culture, perceive, use, transform, and manage the physical environment in different ways and are in turn impacted by changes to that environment. Each case study highlights a specific method and tool of geographic analysis and introduces students to the value of different approaches to environmental issues.

**NOTE: Students enrolled in either the BSc Honours or Specialization in Environmental Science are not required to have the GEOG 220 prerequisite, and may substitute GEOL 210 for either GEOG 272 or 274.*

GEOG 298 *Selected Topics in Geography* (3 credits)**GEOG 299 *Selected Topics in Geography* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Geography Course Guide.

GEOG 300 *Environment: Historical and Cultural Perspectives* (3 credits)

Prerequisite: GEOG 290 or permission of the Department. This course explores selected aspects of nature and culture in Western thought. It focuses on four overlapping themes: 1) it presents a broad historical overview of the questions that humans have posed concerning the habitable Earth and their relationships to it; 2) it looks in more detail at one of those questions, namely, the extent to which human agency has transformed the Earth; 3) it explores the relations between attitudes, values and behaviour, focusing mainly on the idea of wilderness; and 4) it traces the roots and describes the main characteristics of contemporary environmentalism.

GEOG 301 *The Sustainable University Campus* (3 credits)

Prerequisite: 30 university credits or permission of the Department. With the campus as the laboratory, this course explores and contributes to building a more sustainable campus community. It is designed to support Concordia's commitment to sustainability while providing students with an applied learning experience. Students gain experience in planning and implementing interdisciplinary research projects using a variety of qualitative and quantitative techniques. They learn about participatory action research, the application of sustainability concepts in a living and learning organization, and work in teams to develop creative and actionable projects that contribute to moving the University in a more sustainable direction. The course integrates theory and practice. The Concordia Campus Sustainability Assessment as well as recent literature and case studies from the sustainability assessment and reporting fields form the theoretical foundations of the course. The course uses lectures, guest speakers, workshops, and project work as learning tools.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 317 *Population Geography* (3 credits)

Prerequisite: GEOG 220 or permission of the Department. This course focuses on demographic processes and their relevance to current planning and policy issues. The lectures examine evolving patterns of fertility, mortality, and migration, the spatial and temporal processes that fashion them, and their interaction as expressed in population growth, age structure, and policy issues such as aging, low fertility in post-industrial societies, high fertility and poor health in some less developed countries. In response to now widely available electronic demographic data, the laboratory develops students' skills in the methods of demographic analysis and interpretation through the use of desktop spreadsheet programs (Excel). Lectures and laboratory.

GEOG 318 *Vanishing Borders: Regions and the New International Order* (3 credits)

Prerequisite: GEOG 220, or completion of 30 credits for students enrolled in a Social Science program, or permission of the Department. This course examines the argument that as globalization reduces and removes the effects of international boundaries, regions are becoming more important in the global economy and in the global political system. Emerging new forms of regionalism are discussed, such as transborder regions, regions based on transnational economic integration, and hi-tech regions. The changing nature of more traditional regions, such as metropolitan regions and regions based on sub-state nationalism is also considered.

GEOG 321 *A World of Food* (3 credits)

Prerequisite: 24 university credits. This course examines the geographical processes that have affected the production and consumption of food from the beginnings of agriculture to the rise of genetically modified organisms, and considers the part played by different patterns of diet and cuisine in shaping distinctive regions at the global and local scale.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 330 *Urban Geography* (3 credits)

Prerequisite: GEOG 220 or permission of the Department. The geographer's view of the city is explored at two scales: cities as elements of an urban system, including topics such as urbanization and the functional structure of cities; and intra-urban patterns, including the spatial arrangement of land-use and social areas.

GEOG 333 Urban Transportation (3 credits)

Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past evolution and recent functioning of various transport modes in cities around the world. Recent debates about desirable levels of car, transit, and non-motorized modes feature prominently. Techniques of analyzing urban transport and public policy options are considered in light of burgeoning concerns about sustainable development and the worldwide growth of motorization.

NOTE: Students who have received credit for URBS 310 may not take this course for credit.

GEOG 342 The Making of the Irish Landscape (3 credits)

Prerequisite: Second-year standing or permission of the Department. This course focuses on the evolution of the Irish landscape and examines the physical, political, social, economic and attitudinal processes that have shaped the cultural landscape from prehistoric times to the present.

NOTE: Students who have received credit for this topic under a GEOG 398 number may not take this course for credit.

GEOG 355 Resource Analysis and Management (3 credits)

Prerequisite: GEOG 290 or permission of the Department. The course is concerned with the use of the Earth's natural resources and with the economic, institutional, and ecological factors that affect, condition, and control the use of these resources. It examines various approaches to analyzing, evaluating, and resolving resource issues and conflicts. These approaches are applied to Canadian forestry, fisheries, water, energy, and mineral resources.

GEOG 361 Research Design and Qualitative Methods (3 credits)

Prerequisite: GEOG 260 or permission of the Department. This course introduces students to commonly employed methods and techniques for undertaking social science research. After reviewing the philosophical considerations underlying particular research traditions and the merits and limitations of distinct types of research strategies, the course examines specific sets of methods and the kinds of questions and research topics for which they are best suited. The focus is on qualitative methods but also examines the complementarity of qualitative and quantitative techniques and the broader research designs in which quantitative techniques can be employed. Readings are supplemented with in-class and field exercises. Occasional involvement in fieldwork outside of class time is required.

NOTE: Students who have received credit for GEOG 360 may not take this course for credit.

GEOG 362 Statistical Methods (3 credits)

Prerequisite: GEOG 361 or permission of the Department. This course introduces statistical methods for geographers. Topics include sampling, data manipulation, probability distributions, statistical inference, hypothesis testing, correlation and regression. Lectures and laboratory.

NOTE: Students who have received credit for GEOG 360 may not take this course for credit.

GEOG 363 Geographic Information Systems (3 credits)

Prerequisite: GEOG 260 or permission of the Department. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.

NOTE: Students who have received credit for URBS 335, 387, or 487 may not take this course for credit.

GEOG 371 Landscape Ecology (3 credits)

Prerequisite: GEOG 272, 274. The objective of this course is to combine perspectives and principles originating in ecology and geography for application in conservation, restoration, and more sustainable land use. Students examine how natural processes and human activities interact and contribute to landscape change, and how landscape patterns influence the abundance and distribution of plants and animals. Topics include natural processes such as fire, water, and the movement of organisms; human activities such as transportation infrastructure and urban development; and methods for analyzing landscape structure such as patches, corridor networks, and landscape metrics. Lectures and laboratory.

GEOG 372 Plant Reproductive Ecology (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course looks at pollination, seed abscission and dispersal, granivory, germination and seedbeds. The applied issues addressed here include allergies, the impoverishment of pollinator diversity, the problem of contamination by GM crops, and the capacity of plant species to migrate at the pace required by fast climate change. There is a mandatory one-day field trip as well as a lab component.

NOTE: Students who have received credit for GEOG 373 or 374 may not take this course for credit.

GEOG 373 Plant Community Ecology (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. This course examines plant community dynamics as a consequence of the population dynamics of the constituent plant species. The role of natural disturbances (such as hurricanes, ice storms, and fire) in community dynamics is stressed, particularly as they affect forests. Applied issues such as vegetation mapping, prescribed burning in national parks, and species' responses to climate change are explored in depth. There is a mandatory one-day field trip as well as a lab component.

NOTE: Students who have received credit for GEOG 372 or 374 may not take this course for credit.

GEOG 375 Hydrology (3 credits)

Prerequisite: GEOG 272, 274; or permission of the Department. The course examines the hydrologic cycle, with a main focus on surface hydrology. Topics covered include the organization of the river network, precipitation over a watershed, runoff, flood frequency analysis, estimation of peak streamflows, flow, and sediment transport in rivers. Assignments provide experience in the practical aspects of hydrological data treatment using Canadian examples. The course aims at understanding the mechanics of processes governing the motion of water on hillslopes and in rivers, which are essential to water management. Lectures and tutorial.

GEOG 377 Landform Evolution (3 credits)

Prerequisite: GEOG 272; GEOG 274 or GEOL 210; or permission of the Department. This course examines the processes responsible for the development and evolution of the Earth's landforms, including human modifications to those landforms. Topics include the study of fluvial, coastal, glacial, periglacial, and arid landforms. Lectures and laboratory.

NOTE: Students are strongly encouraged to take GEOL 210.

GEOG 378 The Climate System (3 credits)

Prerequisite: GEOG 272; GEOG 274 or GEOL 210; or permission of the Department. This course examines the interacting components of the climate system (atmosphere, ocean, ice, land and vegetation) and the key features of the present-day weather and climate systems; including a focus on how the climate system has changed in the past, and the processes, both natural and human-induced, which drive and moderate these changes. Methods used to reconstruct past climate changes, and the use of climate models to understand climate system interactions and change are discussed.

GEOG 398 Selected Topics in Geography (3 credits)**GEOG 399 Selected Topics in Geography** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

GEOG 400 Political Ecology (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course explores the politics of the environment from the perspective of critical human geography. Land degradation and transformation, environmental governance, social movements, and environmental conflicts are some of the topics that are covered. The course examines how political struggles not only rearrange the environment, but also forge new environmental meanings, identities, and spaces.

GEOG 406 Tropical Forests (3 credits)

Prerequisite: GEOG 372 or 373 or 374; or permission of the Department. This course focuses on three themes: how tropical forest ecosystems function and change; the causes and consequences of deforestation and faunal impoverishment; and the ecological and sociological problems faced by conservationists in the tropics.

GEOG 407 Indigenous Resource Management (3 credits)

Prerequisite: GEOG 300 or permission of the Department. This course explores the relationship between indigenous peoples and the environment. It focuses on two primary themes: first, it looks at ways in which ecological knowledge shapes indigenous resource management, land tenure, and sea-rights systems; and second, it examines the roles of indigenous peoples and state authorities in land, sea, and resource management.

NOTE: Students who have received credit for GEOG 304 or for this topic under a GEOG 498 number may not take this course for credit.

GEOG 417 Population and the Environment (3 credits)

Prerequisite: GEOG 317 or permission of the Department. This course examines the scientific basis for concern that the world is, or soon will be, overpopulated. Two themes are emphasized: (1) environmental stress is the product of lifestyles and the production systems that support lifestyles, as well as population numbers and growth; (2) the relationship between population and environment is mediated by social organization; people are both constrained by social structures, and intelligent human agents of demographic and environmental change. The course examines these issues from theoretical, historical, empirical, and policy perspectives.

GEOG 418 Geographies of Postcolonialism (3 credits)

Prerequisite: GEOG 300 or permission of the Department. Based largely on scholarship about the Americas, this course introduces students to theories of the colonial present and trace geographies of a variety of contemporary colonial processes and anti-colonial struggles.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 430 The Social and Cultural Geographies of Montreal (3 credits)

Prerequisite: GEOG 361 or URBS 360. This course explores the social and cultural geographies of Montreal with particular emphasis on how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.

NOTE: Students who have received credit for URBS 320 or 420 may not take this course for credit.

GEOG 431 Urban Planning in the Developing World (3 credits)

Prerequisite: GEOG 330 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations, with a focus on East and South East Asia. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions including governments, multilateral development agencies, and non-governmental organizations are reviewed.

NOTE: Students who have received credit for GEOG 430 or URBS 481, or for this topic under a URBS 398, URBS 498, or GEOG 498 number, may not take this course for credit.

GEOG 435 Transportation Impact Assessment (3 credits)

Prerequisite: URBS 310 or GEOG 333; URBS 335 or GEOG 363; or permission of the Department. This course introduces students to the quantitative analysis of the environmental (e.g. emissions) and social impacts (e.g. accessibility) of transportation system interventions. Students are introduced to, and gain hands-on experience with, the traditional transportation planning and modelling process aided by the use of a Geographic Information System (GIS)-based transportation decision aid tool. A real-world case-study region and transportation system are used to illustrate the different elements of the planning and modelling process and how this can be used in impact assessment. Lectures and laboratory.

NOTE: Students who have received credit for URBS 435 or for this topic under a GEOG 498 or URBS 498 number may not take this course for credit.

GEOG 440 Geography and Public Policy (3 credits)

Prerequisite: 33 credits in Geography or permission of the Department. This course examines the relationship between geographical approaches to problems and issues, and the public policy process. It discusses such topics as the relevance of geographical information and geographical research to policy makers, the need for assessment of the spatial and environmental impact of public policies, and the role of geographers in the public policy process.

GEOG 450 Industrial Restructuring (3 credits)

Prerequisite: GEOG 318 or URBS 380 or permission of the Department. In the age of globalization and heightened market uncertainty, firms are assuming new spatial and organizational forms to remain innovative and competitive. This course surveys both theories and policies on these restructuring initiatives in advanced capitalist countries. In addition to assessing the new challenges and opportunities that firms face in the present context, the course examines the changing role of national, state, and local governments in encouraging and shaping new economic development strategies.

NOTE: Students who have received credit for URBS 450 or for this topic under a GEOG 498 or URBS 498 number may not take this course for credit.

GEOG 458 Environmental Impact Assessment (3 credits)

Prerequisite: GEOG 355 or permission of the Department. This course examines the conceptual bases, procedures, and methodology of Environmental Impact Assessment (EIA). The effectiveness of EIA as a decision-making process in the promotion of good environmental planning is analyzed, including its role in assessing the potential effects of certain activities on the natural environment as well as on social, cultural, and economic aspects of the environment.

GEOG 463 Advanced Geographic Information Systems (3 credits)

Prerequisite: GEOG 363 or URBS 335; or permission of the Department. This course focuses on database structure and management as well as advanced spatial analysis techniques. It considers both practical and theoretical questions of interpretation of GIS in the context of particular problems and real data sets. The course involves hands-on use of ArcGIS software in a laboratory setting. Lectures and laboratory.

GEOG 465 Remote Sensing (3 credits)

Prerequisite: GEOG 363 or URBS 335, or permission of the Department. This course provides basic knowledge about the theory and practice of remote sensing, its potential and limits. The course is divided in five parts: 1) fundamentals of remote sensing, where the physical basis of remote sensing is explained; 2) sensors and orbits (different types of sensors, passive, active, and thermal sensors); 3) digital image processing, looking at image enhancement, filtering, classification, and how to obtain thematic data from raw imagery; 4) applications of remote sensing such as forestry, urban studies, water pollution, and agriculture; and 5) problems and challenges associated with remote sensing. Practical examples for all these topics will be covered in the laboratory sessions. Lectures and laboratory.

GEOG 466 Geomedia and the Geoweb (3 credits)

Prerequisite: GEOG 363 or URBS 335; or permission of the Department. This course introduces students to geospatial technologies that have dramatically changed the way one interacts with the environment. Students acquire the geovisualization skills required to design meaningful maps in the context of the Geoweb, and are exposed to the growing body of literature that critically envisions the socio-political dimensions of these new forms of cartographic expression. Lectures and laboratory.

GEOG 467 Environmental Modelling (3 credits)

Prerequisite: GEOG 362 or BIOL 322; enrolment in the BSc Honours Environmental Science or BA Honours Human Environment; permission of the Department. The different approaches to modelling the biophysical, built, or human environment are examined. The conceptualization of simple models to examine how human interventions affect the environment is investigated. Different modelling approaches such as system models, computer visualization and simulation are covered. Students develop a model scheme related to a topic of interest. Lectures and laboratory.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 470 *Environmental Management* (3 credits)

Prerequisite: GEOG 375 or 377, or permission of the Department. This course provides students with an understanding and appreciation of the field of environmental management and its contribution to addressing the impacts of human activities on the natural environment. Assessment of the limitations associated with conventional command-and-control approaches to environmental management are considered. The course also focuses on emerging concepts and frameworks associated with a recent rethinking of environmental management approaches, including complex adaptive systems, social-ecological systems, and resilience.

GEOG 472 *Environmental Change during the Quaternary* (3 credits)

Prerequisite: Six credits of physical geography at the 300 level or permission of the Department. This course examines environmental change over the last three million years to show how the biophysical environment and the landscape of the Earth have changed during the time that humans have lived on the planet. Theories covered include climate and sea-level changes as well as changes in vegetation associations, sea-ice cover, and numbers of mammals. Particular attention is paid to the degree and frequency of change and techniques of assessing environmental change.

NOTE: Students who have received credit for GEOG 372 or this topic under a GEOG 498 number may not take this course for credit.

GEOG 473 *Environment and Health* (3 credits)

Prerequisite: GEOG 317 or permission of the Department. This course examines geographical approaches to the study of health, focusing on the investigation of spatial variations in disease incidence, the ecology of selected diseases, and the links between health and the biophysical, social, and built environment. Focus is placed on critical examinations of approaches and methods of explanation.

GEOG 474 *Sustainable Forest Management* (3 credits)

Prerequisite: GEOG 372 or 373 or 374; or permission of the Department. This course looks at changes in the exploitation and sustainable management of the forest resource in Canada and the United States. Topics include the evolution of harvesting strategies and their effect on species composition; the effects of technological changes in cutting, transportation, and milling on forests; and the recent evolution of the tension between environmentalists and foresters. There is a mandatory field trip.

GEOG 475 *Water Resource Management* (3 credits)

Prerequisite: GEOG 355; GEOG 375 or 377; or permission of the Department. This course examines the complexity of, and necessity for, better water resource management from the viewpoint of ecological and economic sustainability as well as social equity and basic human health and dignity. Topics include the qualities, values, and uses of water — consumptive and non-consumptive, economic and environmental; major regional and global water management issues; factors affecting water supply reliability and challenges to maintain and improve long-term quality and equitable service in different situations; and the ways domestic, industrial, and agricultural water users can conserve water.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 478 *Climate Change: Science, Impacts and Policy* (3 credits)

Prerequisite: GEOG 378 or equivalent; or permission of the Department. This course examines the science, impacts and policy options surrounding recent and future global climate change. The first part of the course focuses on the basic science of global warming including the greenhouse effect, climate models, and predictions of future climate change, and an assessment of possible climate impacts. The course concludes with an overview of potential solutions to climate change, including national and international climate policy, energy alternatives, and technological approaches to reducing human impacts on the climate system.

NOTE: Students who have received credit for this topic under a GEOG 498 number may not take this course for credit.

GEOG 490 *Internship in Geography* (3 credits)

Prerequisite: Permission of the Department. This course provides final-year students the opportunity to apply their geographical skills and training in a workplace environment. In consultation with the supervisor, students identify a placement related to their interests, develop and carry out a project approved by both employer and academic supervisor, and/or keep a daily log of how the tasks and duties performed relate to and build upon their academic studies. The internship involves 100 hours of unpaid work and contribution to a seminar series.

**GEOG 491 *(also listed as URBS 491)*
Honours Essay (6 credits)**

Prerequisite: Permission of the Department. The course requires the student to propose and conduct a research project and to produce a substantial report under the supervision of a faculty advisor.

GEOG 495 *Field Research* (3 credits)

Prerequisite: 30 program credits and permission of the Department. This course gives the student the experience of field research in human-environment interactions. The field excursion, often in combination with a local organization, is typically two or three weeks in duration.

GEOG 498 *Advanced Topics in Geography* (3 credits)**GEOG 499 *Advanced Topics in Geography* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

Geology

GEOL 203 *Introduction to Environmental Geology* (3 credits)

Prerequisite: GEOL 210 recommended. Environmental geology is concerned with the physical, chemical, and biological processes that have acted, and continue to act, upon the planet, shaping its evolution. The course examines the interactions of lithosphere, mantle, core, biosphere, atmosphere, cryosphere, and hydrosphere. The Earth's climate is in part determined by these Earth system interactions, and climate change throughout the Earth's history is a central theme of the course.

GEOL 204 *Natural Disasters* (3 credits)

This course introduces students to natural disasters. Students gain an understanding of the geological and meteorological environments of the world that allow humans to plan for avoidance and mitigation of disasters. Topics may include plate tectonics, earthquakes, volcanoes, tsunamis, landslides and mudslides, hurricanes, floods, wildfires, ice storms, thunderstorms, and tornadoes. *NOTE: Students who have received credit for this topic under a GEOL 298 number may not take this course for credit.*

GEOL 206 *Earthquakes, Volcanoes, and Plate Tectonics* (3 credits)

This course is for students with little or no previous background in the earth sciences, providing an up-to-date account of our present knowledge of earthquakes and volcanoes, and the use of this information in the development of the theory of plate tectonics. Areas of concentration are: nature, distribution, and causes of earthquakes and volcanic eruptions, measuring earthquakes, great earthquakes and volcanic eruptions in world history, products of volcanic eruptions, and hazards from, and prediction of, earthquakes and volcanic eruptions. The theory of plate tectonics and the evolution of mountain belts of the world are studied. Lectures only.

GEOL 208 *The Earth, Moon and the Planets* (3 credits)

The course emphasizes the cosmic perspective of the Earth and focuses attention on how the results of the last two decades of planetary exploration have brought about an intellectual revolution concerning the planets, especially their surface features, processes, and histories. Lectures only.

GEOL 210 *Introduction to the Earth* (3 credits)

This course provides an overview of the physical processes that govern how the Earth works. Topics include origin of the solar system and Earth; analysis of the internal structure of the Earth; minerals and rocks; igneous and metamorphic processes; deformation of the crust; surficial processes, including weathering, deposition and glaciation. The course culminates with the integration of these geological processes in the theory of plate tectonics, and goes on to examine the interactions of crust, mantle, atmosphere, and biosphere from this perspective. Laboratory work includes the identification of rocks and minerals, map exercises, and a field trip. Lectures and laboratory.

GEOL 216 *Field Methods* (3 credits)

Prerequisite: GEOL 210. The purpose of this course is twofold: to learn the basic methods that geologists, physical geographers, and environmental scientists use in the field (including learning how to map, measuring stratigraphic sections, and solving field problems based on observations) and to become familiar with the immediate geological environment of the Montreal region from the young Quaternary sediments, Mesozoic intrusive rocks and Paleozoic assemblages (including rocks of the St. Lawrence Lowlands) to the ancient Precambrian, crystalline basement. Two-week field school in the spring, immediately after the final examination.

GEOL 298 *Selected Topics in Geology* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

GEOL 302 *Palaeobiology* (3 credits)

Prerequisite: GEOL 210. General discussion covers taphonomy, processes and patterns of evolution, extinction, ontogeny, palaeoecology and taxonomy. Systematics, morphology, biostratigraphic value of selected macro-invertebrate fossils will be included in the latter half of the course. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 212 may not take this course for credit.

GEOL 331 *Evolution of the Earth* (3 credits)

Prerequisite: GEOL 210 or permission of the Department. The geological evolution of planet Earth is studied in the context of the theory of plate tectonics using interpretations of stratigraphic, structural, seismic, paleontologic, and geochronologic data. A systematic review of the geological evolution of the Earth and development of life forms is examined from the time of formation of the Earth to the present, including case studies of mountain belts. In the lab, rock suites and geological maps representative of different periods of Earth history are examined. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 310 may not take this course for credit.

GEOL 398 *Selected Topics in Geology* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

GEOL 414 Undergraduate Research (6 credits)

Prerequisite: For third-year honours students. Honours students in their final year are expected to show competence in isolating and examining a geological problem under the supervision of a faculty advisor. A written application to take the course, including a brief outline of the research project, must be made to the Department before April 15 of the second year. The application is reviewed by a committee and a decision forwarded by mail. The results of research must be presented in the form of an undergraduate thesis, two copies of which must be submitted by April 1.

NOTE: Written requests from specialization students, with appropriate academic records, to take the course will be considered.

GEOL 415 Plate Tectonics and Crustal Evolution (3 credits)

Prerequisite: GEOL 210; GEOL 331 or GEOG 377; or permission of the Department. Techniques of data collection in tectonics. Structure and rheology of the upper mantle. Tectonics of crustal types to include shields, platforms, passive continental margins, Phanerozoic foldbelts, continental rifts, island-arc trench belts and oceanic rises, sea-floor spreading, plate tectonics, magma associations, and plate reconstructions. Crustal origin and growth. Lectures and laboratory.

NOTE: Students who have received credit for GEOL 315 may not take this course for credit.

GEOL 440 Seminar in Current Research on Environmental Earth Science (3 credits)

Prerequisite: GEOL 331 or GEOG 377, or 60 credits in an Engineering program, or permission of the Department. This course covers current research in environmental Earth science; topics vary from year to year, but will generally include: mantle-biosphere-atmosphere interactions, the carbon and methane cycles, and the geological climate record. Evaluation is based on seminar participation and written work.

NOTE: Students who have received credit for this topic under a GEOG or GEOL 498 number may not take this course for credit.

GEOL 498 Advanced Topics in Geology (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

31.130.1 URBAN STUDIES

Urban Studies is a multidisciplinary program, designed to introduce the student to the processes of planned change in urban environments. Urban Studies provides a core of urban-planning courses involving field studies, planning projects, and the acquisition of technical skills. Complementary courses in Sociology, Political Science, Economics, and Geography provide the necessary approaches and understanding in order to consider complex urban development. The program is designed for students planning to undertake a post-graduate degree in planning or a related field and also provides required training for work in the planning, real estate, and social service fields.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

All course substitutions must be approved by the director of Urban Studies and Urban Planning. Students enrolled in the Major in Urban Studies, or other undergraduate programs in Arts and Science, seeking to transfer to the BA Specialization in Urban Planning normally request a transfer at the end of their first year, after completing a minimum of nine URBS credits. A minimum GPA of 2.7 is required to transfer. Students request transfer by submitting a short letter of intent to the Department by April 30. The director communicates the decision directly to students by the end of May.

For the following programs URBS 230³ and URBS 240³ may serve as prerequisites for courses in Anthropology and Sociology.

66 BA Honours in Urban Planning*Stage I*

- 15 URBS 230³, 240³, 250³, 260³, 293³

Stage II

- 15 URBS 300³, 333⁶, 335³, 360³

- 12 Chosen from GEOG 330³; URBS 310³, 338³, 380³; and up to 3 credits from ARTH 374³, POLI 349³

Stage III

- 12 URBS 433⁶, 491⁶

- 12 Chosen from URBS 420³, 450³, 460³, 480³, 481³, 486³, 488³, 490³, 495³; and up to 6 credits from GEOG 463³, 465³, 466³

63 BA Specialization in Urban Planning*Stage I*

- 15 URBS 230³, 240³, 250³, 260³, 293³

Stage II

- 15 URBS 300³, 333⁶, 335³, 360³

- 12 Chosen from GEOG 330³; URBS 310³, 338³, 380³; and up to 3 credits from ARTH 374³, POLI 349³

- Stage III
 6 URBS 433⁶
 15 Chosen from URBS 420³, 435³, 450³, 460³, 480³, 481³, 483³, 486³, 488³, 490³, 495³; and up to 6 credits from GEOG 463³, 465³, 466³
- 42 BA Major in Urban Studies**
 Stage I
 12 URBS 230³, 240³, 250³, 260³
 Stage II
 9 URBS 300³, 335³, 360³
 12 Chosen from GEOG 318³, 330³; URBS 310³, 338³, 380³; and up to 3 credits from ARTH 374³, POLI 349³
 Stage III
 9 Chosen from URBS 420³, 450³, 460³, 480³, 481³, 486³, 488³, 490³, 495³; and up to 3 credits from GEOG 463³, 465³, 466³
- 30 Minor in Urban Studies**
 6 URBS 230³, 240³
 24 Chosen from GEOG 220³, 330³; URBS 250³, 260³, 293³, 300³, 310³, 338³, 380³, 420³, 450³, 460³, 480³, 481³, 486³, 488³, 490³

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

URBS 210 Urban Issues (3 credits)

This course presents contemporary issues regarding the city and includes a behind-the-scenes look at how planning and development are carried out. The principles and practices of community planning are addressed to enable students to develop critical thinking skills about the metropolitan world in which they live.

URBS 230 Urban Development (3 credits)

This course examines how and why cities grow and change over time. The relationships between socio-cultural, economic, and physical aspects of urban development are considered at the local, city, and regional scales.

NOTE: Students who have received credit for URBS 280 may not take this course for credit.

URBS 240 Planning (3 credits)

This course examines the emergence and evolution of contemporary planning ideas within the broader historical context of 19th- and 20th-century city development. Special attention is given to how planning theories and practices have informed the development and management of urban, suburban and rural environments.

URBS 250 Representation Methods in Urban Studies (3 credits)

This course introduces students to theories and methods of graphic representation. It focuses on methods used to analyze and communicate data with an emphasis on spatial information on built and social environments. The representation methods include two- and three-dimensional views, cartography, as well as data visualization. Physical and digital tools are covered. Lectures and laboratory.

URBS 260 Analytical Methods in Urban Studies (3 credits)

This is an introduction to qualitative research skills associated with urban studies. The emphasis is on the use of data sources and collection techniques along with analytical procedures appropriate to questions of urban planning and public policy. Lectures and laboratory.

URBS 293 Law and Regulation in Urban Planning (3 credits)

Urban planning as governmental activity is defined by planning legislation in Quebec. This course covers the major bodies of legislation on urban plans, local development plans, environmental protection, agricultural land preservation, heritage and economic development. The law is a framework for development control and direct intervention at the municipal, regional and provincial levels. This is an essential course for those intending to practise urban planning at the municipal level and a good background for the Urban Planning laboratories.

NOTE: Students who have received credit for this topic under a URBS 298 or 398 number may not take this course for credit.

URBS 298 Selected Topics in Urban Studies (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and Geography Course Guide.

URBS 300 Neighbourhood and Community Planning (3 credits)

Prerequisite: GEOG 220 or URBS 230. This course examines theories, issues, and techniques of community-level planning in urban and suburban environments. Particular place-based or identity-based communities and their participation in planning processes are considered. Models of community change and local development are reviewed, along with the policies and supportive infrastructure in cities, including Montreal. Local governance, decision-making, and public participation are considered in light of municipal and regional institutions which currently predominate in Canada's metropolitan areas.

URBS 310 *Urban Transportation* (3 credits)

Prerequisite: GEOG 220 or URBS 230 or permission of the Department. This course examines the past evolution and recent functioning of various transport modes in cities around the world. Recent debates about desirable levels of car, transit, and non-motorized modes feature prominently. Techniques of analyzing urban transport and public policy options are considered in light of burgeoning concerns about sustainable development and the worldwide growth of motorization.

NOTE: Students who have received credit for GEOG 333 may not take this course for credit.

URBS 333 *Urban Laboratory* (6 credits)

Prerequisite: URBS 250, 260; enrolment in the BA Honours in Urban Planning or BA Specialization in Urban Planning. With an emphasis on first-hand knowledge of an area-based problem, students study an urban problem and simulate solutions. Theory and case studies are used to develop appropriate interventions. Plans are prepared and, under the supervision of the professor, are evaluated by the peer group and experts in the field.

URBS 335 *Geographic Information Systems* (3 credits)

Prerequisite: URBS 250. This course is an introduction to current theoretical and practical approaches to Geographic Information Systems (GIS) through which students acquire basic skills and understanding in the use of GIS for spatial analysis. Training is centred on a series of practical assignments using ArcGIS software and for the term project, students explore the potential of GIS for addressing a real-world problem. Lectures and laboratory.

NOTE: Students who have received credit for GEOG 363, URBS 387, or URBS 487 may not take this course for credit.

URBS 338 *Urban Ecology* (3 credits)

Prerequisite: 24 credits; or permission of the Department. Focusing on the impacts of human activities on fauna, flora, soils and air, this course introduces students to ecosystems found in urban environments. This course also examines the flux of energy and materials to and from the city, and places a strong emphasis on policy and planning practices related to urban forestry, site restoration, greening initiatives, environmental justice, and on practices that foster biodiversity and responsible resource management. The course also looks at historical and contemporary views on the relationship between the city and nature.

URBS 360 *Quantitative Research Methods* (3 credits)

Prerequisite: URBS 260. This course covers the most commonly employed methods for quantitative social science research. Students are taught the basics of introductory classical statistics (both descriptive and inferential) and gain experience applying these methods with commonly used software tools and real-world data. Lectures and laboratory.

URBS 380 *Urban and Regional Economic Development* (3 credits)

Prerequisite: URBS 230, 240. This course draws on economic and geographical concepts to examine the process of urbanization. Students begin by focusing on the conventional tools and models for analyzing the nature and structure of cities, and at theories concerning the location of economic activity. It also examines key planning issues associated with the (evolving) role of cities as place of production, distribution, and consumption and considers the role of public policy in addressing these issues. Methods for defining and measuring urban economies for the purpose of analysis are reviewed.

URBS 398 *Selected Topics in Urban Studies* (3 credits)

Special topics in urban studies.

URBS 420 *The Social and Cultural Geographies of Montreal* (3 credits)

Prerequisite: GEOG 361 or URBS 360. This course explores the social and cultural geographies of Montreal with particular emphasis on how the spatial distribution of communities influences urban planning and public policy at the local and regional levels. Complex webs of identities and solidarities informed by socio-economic, linguistic, ethno-cultural, and sexual orientation factors shape the city living experience of individuals and populations alike. Through lectures, discussions, assignments and field trips, students are introduced to a variety of analytical perspectives that investigate the socio-cultural dynamics that contribute to shaping urban settlements, human-environment interactions and local social networks.

NOTE: Students who have received credit for URBS 320 or GEOG 430 may not take this course for credit.

URBS 433 *Advanced Urban Laboratory* (6 credits)

Prerequisite: URBS 333. This is an advanced course in urban design. An overview of current theory and practice is presented. An urban problem is developed and appropriate interventions are considered. These interventions are simulated and the results assessed.

URBS 435 *Transportation Impact Assessment* (3 credits)

Prerequisite: URBS 310 or GEOG 333; URBS 335 or GEOG 363; or permission of the Department. This course introduces students to the quantitative analysis of the environmental (e.g. emissions) and social impacts (e.g. accessibility) of transportation system interventions. Students are introduced to, and gain hands-on experience with, the traditional transportation planning and modelling process aided by the use of a Geographic Information System (GIS)-based transportation decision aid tool. A real-world case-study region and transportation system are used to illustrate the different elements of the planning and modelling process and how this can be used in impact assessment. Lectures and laboratory.

NOTE: Students who have received credit for GEOG 435 or for this topic under a GEOG 498 or URBS 498 number may not take this course for credit.

URBS 450 Industrial Restructuring (3 credits)

Prerequisite: GEOG 318 or URBS 380 or permission of the Department. In the age of globalization and heightened market uncertainty, firms are assuming new spatial and organizational forms to remain innovative and competitive. This course surveys both theories and policies on these restructuring initiatives in advanced capitalist countries. In addition to assessing the new challenges and opportunities that firms face in the present context, the course examines the changing role of national, state, and local governments in encouraging and shaping new economic development strategies.

NOTE: Students who have received credit for GEOG 450 or for this topic under a URBS 498 or GEOG 498 number may not take this course for credit.

URBS 460 Reading the Urban Form (3 credits)

Prerequisite: URBS 360 and completion of 48 university credits; or permission of the Department. This course focuses on the physical reality of the city, or its urban form, as well as the ongoing process of city building and urban morphogenesis. It introduces tools to properly describe, quantify, and interpret urban form in its spatial and temporal dimensions. It seeks to develop a better understanding of the processes of which the contemporary urban artifact is the result. Along with theoretical presentations, the course makes use of case studies conducted in different urban and cultural contexts, and introduces many examples of practical applications of morphological analysis in urban planning and design.

NOTE: Students who have received credit for this topic under a URBS 498 number may not take this course for credit.

URBS 480 Impact Assessment (3 credits)

Prerequisite: URBS 360 and completion of 48 university credits; or permission of the Department. The impacts of projects on urban and suburban communities and the environment are studied within the context of environmental protection legislation. The methods of assessment are then applied to specific cases.

URBS 481 Urban Planning in the Developing World (3 credits)

Prerequisite: GEOG 330 or URBS 380 or permission of the Department. This course explores the growth and planning of large metropolitan areas in developing nations, with a focus on East and South East Asia. Issues and problems associated with recent urbanization are examined along with potential solutions offered by urban planning and public policies. The planning roles of institutions including governments, multi-lateral development agencies, and non-governmental organizations are reviewed.

NOTE: Students who have received credit for this topic under a URBS 398, GEOG 398, URBS 498, or GEOG 498 number may not take this course for credit.

URBS 483 Directed Studies/Practicum in Urban Planning I (3 credits)

Prerequisite: Completion of 60 university credits; enrolment in the Specialization in Urban Planning. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 484 Directed Studies/Practicum in Urban Planning II (3 credits)

Prerequisite: Completion of 60 university credits; enrolment in the Specialization in Urban Planning. Through a case study or practicum of 120 hours with a private or public institution, or community interest group, students acquire experience in a professional working environment.

URBS 486 Behaviour and the Environment (3 credits)

Prerequisite: URBS 360 and completion of 48 university credits; or permission of the Department. Human behaviour is seen both as a determinant and as an outcome of environment. Behavioural topics include perception and attitudes, spatial behaviour, spatial cognition, and time-path analysis. Student projects involve applying the theory to a location study, a facility management study, or other relevant application.

URBS 488 Analyzing Choice (3 credits)

Prerequisite: URBS 360 or GEOG 362; or permission of the Department. This course examines the theory and statistical techniques commonly used to analyze choice. Students design, administer and analyze the results of a stated preference survey on a topic related to people's choices and the environment.

URBS 490 Public Space and the Public Interest (3 credits)

Prerequisite: URBS 360 and completion of 48 university credits; or permission of the Department. Public space is understood as physical space, as well as the space of media and communications, which are openly accessible to all members of a community. Changing definitions of public space are examined in the context of societal and cultural change. The roles of agents and stakeholders in changing the definitions of public interest are also examined. Legal and normative frameworks for the definition of space, control, and access are also introduced.

NOTE: Students who have received credit for this topic under a URBS 498 number may not take this course for credit.

URBS 491 Honours Thesis or Project (6 credits)

Prerequisite: Completion of 60 university credits; enrolment in the Honours in Urban Planning. Students may undertake independent, supervised research leading to the production of an honours thesis. They may also undertake a major urban study leading to recommendations for public or private interventions.

NOTE: Students who have received credit for GEOG 491 may not take this course for credit.

URBS 495 *International Field Research* (3 credits)

Prerequisite: 60 university credits and permission of the Department. The political, social, and cultural realities of planning in a setting outside Canada are explored in a field course. Preparation for the field experience at home is accompanied by a stay in the chosen international city, where a field investigation is conducted, usually in collaboration with local partner organizations.

NOTE: Students who have received credit for this topic under an URBS 398 or 498 number may not take this course for credit.

URBS 498 *Advanced Topics in Urban Studies* (3 credits)

Special topics in urban studies.

31.160

HISTORY

Faculty

Chair

NORMAN INGRAM, PhD *Edin.*, Professor, Provost's Distinction

Associate Chair

FREDERICK BODE, PhD *Yale*, Professor

Distinguished Professors Emeriti

ALAN H. ADAMSON, PhD *Lond.*

DONALD E. GINTER, PhD *Calif. (Berkeley)*

ROBERT TITTLER, PhD *N.Y.*

MARY VIPOND, PhD *Tor.*

Professors

GRAHAM CARR, PhD *Maine*

FRANK R. CHALK, PhD *Wis. (Madison)*

PETER GOSSAGE, PhD *U.Q.A.M.*

STEVEN HIGH, PhD *Ott.*

SHANNON McSHEFFREY, PhD *Tor.*, Provost's Distinction

RONALD RUDIN, PhD *York (Can.)*, Provost's Distinction

Associate Professors

RACHEL BERGER, PhD *Camb.*

CAROLYN FICK, PhD *C'dia.*

ANDREW IVASKA, PhD *Mich.*

WILSON CHACKO JACOB, PhD *N.Y.*

NORA E. JAFFARY, PhD *Col.*

ERICA LEHRER, PhD *Mich.*

BARBARA LORENZKOWSKI, PhD *Ott.*

TED McCORMICK, PhD *Col.*

ELENA RAZLOGOVA, PhD *George Mason*

ERIC H. REITER, PhD *Tor.*

ALISON ROWLEY, PhD *Duke*

ROSEMARIE SCHADE, DPhil *York (U.K.)*

Assistant Professor, James M. Stanford Professorship in Genocide and Human Rights Studies

MAX BERGHOLZ, PhD *Tor.*

Assistant Professors

MATTHEW PENNEY, PhD *Auck.*

TIMOTHY SEDO, PhD *Br.Col.*

THERESA VENTURA, PhD *Col.*

ANYA ZILBERSTEIN, PhD *M.I.T.*

Senior Lecturer

GAVIN TAYLOR, PhD *William & Mary*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

J.W. McConnell Building, Room: LB 1001

514-848-2424, ext. 2435

Department Objectives

It is the mission of the Department of History not only to train historians but to produce articulate and informed graduates who share its commitment to serving the broader community. The Department therefore encourages strength in both teaching and research, responsiveness to a wide range of intellectual perspectives, and involvement in community affairs.

Programs

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

60 BA Honours in History

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits. Students must have a minimum cumulative GPA of 3.3 (B+). All students must maintain a minimum cumulative GPA of 3.3 as well as a minimum annual GPA of 3.3 within courses in History. The minimum acceptable grade in any course is normally "C."

A. Honours Essay Option

- 6 History of Europe (HIST 201³, 202³)
- 3 History of Asia or Africa (from among HIST 242³, 261³, 262³, 263³, 264³)
- 3 History of the Americas (from among HIST 203³, 205³, 209³, 210³, 251³, 253³, 276³, 277³)
- 6 HIST 200-level courses
- 15 HIST 300-level courses
- 3 HIST 304³ (*Tutorial Preparation for the Honours Essay*)
- 3 HIST 402³ (*The Philosophy and Practice of History*)
- 3 HIST 403³ (*Methodology and History*)
- 6 HIST 493⁶ (*Honours Essay Tutorial*)
- 12 HIST 400-level seminars

B. Seminar Option

- 6 History of Europe (HIST 201³, 202³)
- 3 History of Asia or Africa (from among HIST 242³, 261³, 262³, 263³, 264³)
- 3 History of the Americas (from among HIST 203³, 205³, 209³, 210³, 251³, 253³, 276³, 277³)
- 6 HIST 200-level courses
- 18 HIST 300-level courses
- 3 HIST 402³ (*The Philosophy and Practice of History*)
- 3 HIST 403³ (*Methodology and History*)
- 18 HIST 400-level seminars

C. Public History with Internship Option

- 6 History of Europe (HIST 201³, 202³)
- 3 History of Asia or Africa (from among HIST 242³, 261³, 262³, 263³, 264³)
- 3 History of the Americas (from among HIST 203³, 205³, 209³, 210³, 251³, 253³, 276³, 277³)
- 6 HIST 200-level courses
- 6 HIST 300-level courses
- 3 HIST 300-level courses or elective credits from related disciplines
- 3 HIST 306³
- 6 Chosen from HIST 379³, 380³, 381³, 387³, 388³, 389³, 397³
- 3 HIST 402³ (*The Philosophy and Practice of History*)
- 3 HIST 403³ (*Methodology and History*)
- 9 HIST 400-level seminars
- 3 HIST 481³
- 3 HIST 485³
- 3 HIST 486³

60 BA Specialization in History

- 6 History of Europe (HIST 201³, 202³)
- 6 History of Asia or Africa (from among HIST 242³, 261³, 262³, 263³, 264³)
- 6 History of the Americas (from among HIST 203³, 205³, 209³, 210³, 251³, 253³, 276³, 277³)
- 9 HIST 200-level courses
- 27 HIST 300-level courses
- 6 Chosen from any HIST 300- or 400-level courses

60 BA Joint Specialization in English and History

- 6 ENGL 261³, 262³
- 6 Periods before 1800 (British) from ENGL 302⁶, 304⁶ through 328³, 430³ through 441³
- 6 Canadian, American, and postcolonial from ENGL 244³, 360⁶ through 388³, 449³ through 455³

- 6 19th century and 20th century (British and European) from ENGL 324⁶, 331³ through 359³, 394³, 442³, 443³, 446³
- 6 Elective credits from ENGL 224³ through 499³
- 6 History of Europe (HIST 201³, 202³)
- 9 HIST 200-level courses
- 9 HIST 300-level courses
- 6 HIST 300- or 400-level courses

42 BA Major in History

- 6 History of Europe (HIST 201³, 202³)
- 3 History of Asia or Africa (from among HIST 242³, 261³, 262³, 263³, 264³)
- 3 History of the Americas (from among HIST 203³, 205³, 209³, 210³, 251³, 253³, 276³, 277³)
- 6 Chosen from any HIST 200-level courses
- 18 Chosen from any HIST 300-level courses
- 6 Chosen from any HIST 300- or 400-level courses

24 Minor in History

- 6 HIST 201³, 202³
- 12 HIST 200 -level courses
- 6 HIST 300-level courses

24 Minor in Law and Society

- 3 ANTH/HIST/POLI/SOCI 285³
- 6 Chosen from ANTH 202³; HIST 205³; POLI 204³; SOCI 261³
- 15 Chosen from ANTH 380³, 363³; FPST 301³, 321³; HIST 309³, 315³, 316³; PHIL 343³, 345³; POLI 311³, 320³, 350⁶, 388³, 3980³; PSYC 242³; RELI 312³; SOCI 262³, 263³, 362³; of which no more than 3 credits may be at the 200 level; of which no more than 12 credits may be from one department.

NOTE: For details on the course descriptions in the program listed above, please refer to the individual departmental course listings.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are generally open only to students who have successfully completed 24 credits. Students who do not have this prerequisite may register with the permission of the Department.
- (2) 400-level courses are generally open to honours and specialization students, or students of high academic standing with the permission of the Department.

HIST 201 Introduction to European History to 1789 (3 credits)

A survey of the history of Europe to the French Revolution, with emphasis on the development of ideas and political institutions.

NOTE: Students who have received credit for HISZ 201 may not take this course for credit.

HIST 202 Introduction to European History, from 1789 to the Present (3 credits)

A survey of the history of Europe from the French Revolution to the present, with emphasis on the development of ideas and political institutions.

NOTE: Students who have received credit for HISZ 202 may not take this course for credit.

HIST 203 History of Canada, Pre-Confederation (3 credits)

A survey of Canadian history, from settlement to Confederation, emphasizing readings and discussions on selected problems.

HIST 205 (also listed as SCPA 205)

History of Canada, Post-Confederation (3 credits)

A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

NOTE: Students who have received credit for HISZ 205 or SCPA 205 may not take this course for credit.

HIST 209 Quebec to 1867 (3 credits)

An introductory survey of the history of Quebec from its origins as a colony to the creation of modern Canada by the British North American Act of 1867. Particular emphasis is placed on a consideration of those elements of Quebec's past which best assist in the comprehension of the trends prevalent in modern Quebec.

HIST 210 (also listed as SCPA 210)

Quebec since Confederation (3 credits)

A survey of the history of Quebec from the time of Confederation until the present. While due emphasis is placed on political developments in the province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Quebec.

NOTE: Students who have received credit for SCPA 210 may not take this course for credit.

HIST 211 (also listed as **IRST 211**)
History of Ireland (3 credits)

This survey course traces the history of Ireland from the earliest times to the present, with emphasis on the 19th and 20th centuries. Special attention is given to the development of Irish nationalism and relations with Great Britain.

NOTE: Students who have received credit for IRST 211 or for this topic under an IRST 298 number may not take this course for credit.

HIST 212 (also listed as **IRST 210**)
The Irish in Canada (3 credits)

From 17th-century fishermen and traders arriving in Newfoundland to displaced victims of the Famine in the 19th century, to contemporary immigrants from Ireland, the Irish have had a presence in all parts of Canada from the earliest days of settlement. This course examines the emigration and settlement patterns of Irish immigrants in the various regions of Canada across a period of three centuries, paying particular attention to their role in the social, economic, political, cultural, and educational development of Canadian society. The course explores the various strategies by which Irish immigrants both adapted to and transformed the particular host society in which they found themselves, and looks at other immigrant communities as a means of understanding the special contribution of the Irish to Canada.

NOTE: Students who have received credit for IRST 210 or for this topic under a HIST 398 number may not take this course for credit.

HIST 213 (also listed as **IRST 205**)
The Irish in Montreal (3 credits)

Drawing on a diversity of historiographical materials, this interdisciplinary course examines the story of the Irish in Canada with a particular emphasis on Quebec, from the French colonial period through the City of Montreal's golden era of mercantile prominence in the mid-19th century to the break-up of its older Irish neighbourhoods a century afterwards. Starting with the demographics of Irish immigration and settlement, it devotes special attention to social and cultural relations between the Irish and other ethnic groups.

NOTE: Students who have received credit for IRST 205 or for this topic under a HIST 398 number may not take this course for credit.

HIST 219 (also listed as **CLAS 230**)
Ancient Near East (3 credits)

A political, social, economic, and intellectual history of the ancient Near East, this course surveys the period from the origins of civilization in the middle of the fourth millennium to Alexander the Great's conquest of the Persian Empire in the latter part of the fourth century BC.

NOTE: Students who have received credit for CLAS 230 may not take this course for credit.

HIST 223 (also listed as **CLAS 240**)
Greek History from the Bronze Age to Alexander (3 credits)

This course offers a political, social, economic, and cultural history of Greece from the Minoan-Mycenaean period in the second millennium to the end of Classical Greek civilization in the fourth century BC, with special emphasis placed upon Athens.

NOTE: Students who have received credit for CLAS 240 may not take this course for credit.

HIST 225 (also listed as **CLAS 242**)
History of the Roman Republic (3 credits)

This course offers a political, social, economic and cultural history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus.

NOTE: Students who have received credit for CLAS 242 may not take this course for credit.

HIST 235 **The Holocaust** (3 credits)

Beginning with a discussion of Jewish communities in Europe and America before 1933, this course traces the evolution of anti-Semitism, nationalism, and racism, the rise of Hitler and the Nazi movement, the shaping of Nazi ideology, the growing demonization of the victims of the Holocaust and the genocide against them in their various countries, resistance by the victims, and the parts played by bystanders in the outcome of the Holocaust.

NOTE: Students who have received credit for RELI 338 may not take this course for credit.

HIST 242 **History of the Middle East** (3 credits)

This course surveys the history of the Middle East from the rise of Islam to the present. It traces broadly the formation of an Islamic World over a millennium and follows its engagements with modernity, examining closely the shift from the overarching paradigm of the multi-ethnic/multilingual Ottoman Empire to that of the mono-ethnic/monolingual modern nation state. This course covers the political history of the region including the experience of British and French colonialism, the rise of nationalist movements, and the Arab-Israeli conflict, and focuses on its social, intellectual, and cultural history.

NOTE: Students who have received credit for HIST 240 or 241 may not take this course for credit.

HIST 251 **History of the United States to the Civil War Era** (3 credits)

This course surveys American history from settlement to the Civil War Era. It deals with the political and economic framework of American history, and with social and cultural trends.

HIST 253 **History of the United States since the Civil War Era** (3 credits)

This course surveys American history from the Civil War Era to the present. It deals with the political and economic framework of American history, and with social and cultural trends.

HIST 261 *History of South Asia* (3 credits)

This course is an introduction to the intellectual traditions, social structures, and political institutions of South Asia, with particular attention to developments during the past two centuries.

HIST 262 *History of China* (3 credits)

A survey of China's history from earliest times to the modern era.

HIST 263 *History of Japan* (3 credits)

This course surveys Japan's history from earliest times to the modern era. In addition to tracing political developments, it explores other themes such as the changing role of the samurai in history and the evolution of Japanese art, literature, and popular culture.

HIST 264 *History of Africa* (3 credits)

This course is an introductory survey of the history of Africa. It examines the major phenomena of African historical experience, including the development of precolonial kingdoms and trans-Saharan trade, the slave trade, colonial conquests, the rise of nationalism, the challenges of independence, and recent crises such as the Rwandan genocide and HIV-AIDS. Emphasis is placed on popular cultural expression through which people on the continent have experienced, understood, remembered, and negotiated broad historical shifts.

HIST 276 *History of Latin America: The Colonial Period* (3 credits)

This course surveys Latin America up to the wars of independence from Spain. The main themes examined are pre- and post-Columbian indigenous cultures; the Spanish conquest; patterns of colonial trade and economy; the role of the church; and the Bourbon reforms.

HIST 277 *History of Latin America: The Modern Period* (3 credits)

This course surveys Latin American society in the 19th and 20th centuries. The principal topics covered are the social and economic roots of political instability; Mexico under Porfirio Díaz; the Mexican Revolution; Argentina and Brazil under Perón and Vargas; U.S.-Latin American relations; Castro's Cuba; revolution and counter-revolution in contemporary Latin America.

HIST 281 *Film in History* (3 credits)

This course examines how selected commercial films interpret historical events or provide insight into the politics, society, and culture of the times in which they were produced. The course is designed to help develop critical skills for the understanding of film in an historical framework.

NOTE: Students who have received credit for HISZ 281, or for this topic under a HIST 298 or HISZ 298 number, may not take this course for credit.

HIST 283 *The 20th Century: A Global History* (3 credits)

This course introduces students to the history of some of the forces and institutions that have shaped the history of the world in the 20th century, which has been characterized by widespread warfare, genocides, and massive violations against human rights and the natural environment. It has also been a time of unprecedented prosperity of some groups and parts of the globe, as well as an era of tremendous scientific advances.

NOTE: Students who have received credit for HISZ 283 or LOYC 210, or for this topic under a HIST 298 or HISZ 298 number, may not take this course for credit.

HIST 285 *Introduction to Law and Society* (3 credits)

This interdisciplinary course examines the roles law plays in Canada and internationally, from the perspectives of history, political science, anthropology, sociology, and philosophy.

NOTE: Students who have received credit for ANTH 285, POLI 285, or SOCI 285, or for this topic under an ANTH 298, HIST 298, POLI 298, or SOCI 298 number, may not take this course for credit.

HIST 298 *Selected Topics in History* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 300 *British North America* (3 credits)

Prerequisite: See N.B. number (1). This course examines British imperial policy, cross-cultural contact and the development of colonial societies in 18th- and 19th-century North America.

HIST 301 *Late-19th-Century Canada* (3 credits)

Prerequisite: See N.B. number (1). This course examines the politics of confederation and explores the social, economic, and cultural impact of modernization.

HIST 302 *Natives and Newcomers* (3 credits)

Prerequisite: See N.B. number (1). This course examines the interaction of European colonists with the first peoples of eastern North America before 1800. The emphasis is on cultural exchanges between colonists and Natives in the areas of religion, trade, diplomacy, and warfare.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 303 *Native North American History Since 1800* (3 credits)

Prerequisite: See N.B. number (1). This course examines the history of Native North Americans, focusing on the period since 1800. Topics include the emergence of the reserve system and the policy of forced assimilation devised by the governments of Canada and the United States, and the political resurgence and cultural renaissance of Native communities since the mid-20th century.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 304 *Tutorial Preparation for the Honours Essay* (3 credits)

Prerequisite: Approved honours standing in History, or permission of the Department. This course provides honours students in History with the opportunity for tutorial reading and research in preparation for the writing of the honours essay.

HIST 305 *Race and Gender in Canadian History* (3 credits)

Prerequisite: See N.B. number (1). This course examines the lives and experiences of Canadian women and men marginalized because of their race, gender and/or sexuality. By looking at people on the margins, this course explores the intersections of gender, race, and space, and speaks to two key issues of today: equality and justice.

HIST 306 *History and the Public* (3 credits)

Prerequisite: See N.B. number (1). This course is an examination of the practice of history outside the academy and an introduction to the critical analysis of presentations of history in public and popular culture. Topics include archives, corporate and popular history, museums and historic sites, preservation, film and television, theme parks, and anniversary commemorations. A special emphasis is placed on public controversies and ethical dilemmas involving historical interpretations.

HIST 307 *History of Montreal* (3 credits)

Prerequisite: See N.B. number (1). A study of the origins of the city, its role in the Empire of the St. Lawrence, and its rise to metropolitan dominance in Canada. Special emphasis on economic development and on ethnic groupings.

HIST 308 *Cultures in Contact: A History of Migrations to North America* (3 credits)

Prerequisite: See N.B. number (1). This course traces the journeys of men, women, and children who left their homelands and came to North America in search of economic opportunities and political and religious freedoms. Focusing on the 19th- and 20th-century waves of migration, students examine the communities migrants created, the discrimination they faced, and the manifold ways in which they, in turn, changed their host societies.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 309 *Law and Society in Canadian History* (3 credits)

Prerequisite: See N.B. number (1). This course examines selected issues in Canadian history through the lens of important and controversial court decisions. The influence of legal decisions on society as well as public influence on the development of law is considered.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 310 *Canada in the Early-20th Century, 1896–1939* (3 credits)

Prerequisite: See N.B. number (1). An intensive study of early-20th-century Canada concentrating on selected themes in economic, political, social, and cultural history.

HIST 311 *Contemporary Canada, 1939 to the Present* (3 credits)

Prerequisite: See N.B. number (1). An intensive study of Canada since World War II concentrating on selected themes in economic, political, social, and cultural history.

HIST 313 *Quebec in the 19th Century* (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues that arose during the 1800s in the transformation of Quebec from a pre-industrial to an industrial society.

HIST 314 *Quebec in the 20th Century* (3 credits)

Prerequisite: See N.B. number (1). This course explores the major social, economic, and political issues of 20th-century Quebec in the light of the concentration of economic power into relatively few hands early in the century and the declining importance of industrial production since World War II.

HIST 315 *Rights and Freedoms in Canadian Society* (3 credits)

Prerequisite: See N.B. number (1). This course examines historical and contemporary aspects of Canada's culture of rights. Topics include the origins and workings of the Canadian Charter and critiques of rights culture.

NOTE: Students who have received credit for this topic under a HIST 398 or POLI 398 number may not take this course for credit.

HIST 316 *Conflict and Its Resolution* (3 credits)

Prerequisite: See N.B. number (1). This course examines historical, social, cultural, and legal aspects of conflict and the different institutions and techniques that have developed to resolve it. Attention is given to both domestic and international dimensions of conflict.

NOTE: Students who have received credit for this topic under a HIST 398, POLI 398, or SCPA 398 number may not take this course for credit.

HIST 318 *Modernist New York* (3 credits)

Prerequisite: See N.B. number (1). This course explores the history of "Modernist New York" from the vantage points of social and cultural history. Focusing on the decades between 1870 and 1930, it examines the interplay of culture and commerce, the histories of elites and recent immigrants, the role of race, and the dramatic changes in the cityscape.

HIST 319 *Canadian History in Literature, Art and Film* (3 credits)

Prerequisite: See N.B. number (1). An examination of some major events and themes in Canadian history as seen by writers, artists, and filmmakers. Topics will vary from year to year, but will be selected to illustrate how creative works may be combined with more conventional historical sources to enhance our understanding of the past.

HIST 320 *American Culture, 1900–1945* (3 credits)

Prerequisite: See N.B. number (1). This course examines how American cultural expression was affected by the broader historical context of the period. Attention is given to changing aesthetic styles, the impact of technology on production and reception, and the role of culture as a representation of American identity.

HIST 321 *American Culture Since 1945* (3 credits)

Prerequisite: See N.B. number (1). This course examines different forms of artistic expression in the U.S. since World War II. Attention is given to changing aesthetic styles and technological developments, as well as to the role of culture as an expression of American identity at home and abroad.

HIST 323 *(also listed as CLAS 341)*

***Greek History from Alexander to the Roman Conquest* (3 credits)**

Prerequisite: See N.B. number (1). A political, social, economic, and cultural history of the Greek world from Alexander the Great to the Roman conquest of Greece in 146 BC.

NOTE: Students who have received credit for CLAS 341 may not take this course for credit.

HIST 325 *The European Renaissance* (3 credits)

Prerequisite: See N.B. number (1). This course surveys European history from the beginnings of the Italian Renaissance in the late-14th century to the Reformation in the early-16th century. Major themes include Renaissance humanism, the emergence of print culture, the exploration of the New World, changes in social structure, and the consolidation of monarchy.

HIST 326 *Reformations in Early Modern Europe* (3 credits)

Prerequisite: See N.B. number (1). This course surveys the history of Europe from the early Reformation through the end of Europe's religious wars in the mid-17th century. Major themes include the politics of religion, the growth of commerce and social change, competition for empire, and transformation in scientific and political worldviews.

HIST 327 *(also listed as CLAS 343)*

***History of the Roman Empire* (3 credits)**

Prerequisite: See N.B. number (1). This course offers a political, social, economic, and cultural history of the Roman Empire from Augustus to the end of the Roman Empire in the West.

NOTE: Students who have received credit for CLAS 343 may not take this course for credit.

HIST 328 *The Scientific Revolution* (3 credits)

Prerequisite: See N.B. number (1). This course explores the Scientific Revolution in the context of early modern European society and culture. Major themes include the debates over the methods, purposes, and scope of science; the relationship between science, the supernatural, and the occult; the relationship between science, technology, and craft; and scientific networks, institutions, and means of communication.

HIST 330 *(also listed as IRST 312)*

***The Great Irish Famine* (3 credits)**

Prerequisite: See N.B. number (1). This course examines the Irish Famine and its impact on Irish society, culture, and history. Beginning with a thorough examination of the economic, political, and social structures in pre-Famine Ireland, the course studies the causes of, and responses to, the Famine and its impact on society in Ireland and the world, including Quebec. Consideration is also given to the continuing re-examination of the Famine and its role in the politics of memory.

NOTE: Students who have received credit for IRST 312 or for this topic under a HIST 398 number may not take this course for credit.

HIST 332 *United States, Cuban and Mexican Relations* (3 credits)

Prerequisite: See N.B. number (1). This course examines the history of the United States' relations with both Cuba and Mexico from the mid-19th century to the present. As well as studying the ramifications of U.S. involvement in such events as the Spanish-American War (1898), the Mexican Revolution (1910), and the Cuban Revolution (1959), it examines the demographic, political, and cultural impact that Cubans and Mexicans have had on the modern development of the U.S.A.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 333 *History of Haiti: From Contact to Independence* (3 credits)

Prerequisite: See N.B. number (1). This course is a study of Haitian history from early colonization through French control to independence in 1804. It covers pre-Columbian Taino society and the Spanish conquest; the period of piracy and French buccaneering in the 16th and 17th centuries; the emergence of a colonial slave society in the 18th century; the Haitian revolution

and the rise of Toussaint Louverture; questions of class and colour; the emergence of the state; contingencies of citizenship and independence. The legacies of the colonial and revolutionary periods are fundamental to an understanding of post-independence and present-day Haiti.

NOTE: Students who have received credit for HIST 339 may not take this course for credit.

HIST 334 *History of Haiti: From Independence to Present* (3 credits)

Prerequisite: See N.B. number (1). This course is a study of Haitian history from independence to the present. It covers the early post-independence regimes; the demise of the plantation economy and the emergence of the Haitian peasantry; the indemnity to France; later 19th-century neo-colonialism and political instability; the U.S. Marine Occupation (1915 – 1934); culture, race and politics during and after the Occupation; the rise of the Duvalierist state; and post-Duvalierist political instability.

NOTE: Students who have received credit for HIST 339 may not take this course for credit.

HIST 335 *Barbarian Invasions and the Birth of Europe* (3 credits)

Prerequisite: See N.B. number (1). This course examines the arrival and settlement of new populations in the Roman world. It analyzes the changes that this event brought in its wake. Classical civilization was disrupted, but there was also a symbiosis of the old and the new, which in time gave rise to Europe in the Middle Ages.

HIST 336 *Deviancy and Orthodoxy in the History of Mexico* (3 credits)

Prerequisite: See N.B. number (1). This course traces Mexican history from the colonial period to the modern era through an analysis of the various groups that state and society have defined as deviant, including barbarians, heretics, vagrants, lunatics, prostitutes, bandits, and insurgents. This course examines what the shifting preoccupations with and the persecutions of these groups reveal about the creation of political and social orthodoxy in Mexico across time.

HIST 337 *History of Early Medieval Europe* (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Early Middle Ages. The course will explore the fall of the Roman Empire in the West, the period of invasions, the conversions to Christianity and the development of the Western Latin Church, the rise of the Carolingians, the Viking raids, and the structures of society and politics.

HIST 338 *History of Later Medieval Europe* (3 credits)

Prerequisite: See N.B. number (1). A study of European society during the Later Middle Ages. The course will explore the ramifications of the revival of urban and commercial life, the development of national monarchies in France, England, and Spain, the varying fortunes of the Holy Roman Empire, the rise and fall of papacy, the problem of dissent in a theoretically unified society, and the effects of economic chaos and epidemics in the age of the Black Death.

HIST 340 *Early Modern Britain* (3 credits)

Prerequisite: See N.B. number (1). This course surveys the connected histories of England, Scotland, Ireland, and Wales between the 15th and early-18th centuries. Attention is paid to political, social, and cultural developments, as well as to commercial and colonial expansion beyond Europe.

HIST 341 *History of Britain Since 1714* (3 credits)

Prerequisite: See N.B. number (1). This course is a survey of the political, economic, and social development of Britain since the Stuart Era.

HIST 342 *Political and Social Ideas in Early Modern Britain* (3 credits)

Prerequisite: See N.B. number (1). This course traces the history of political and social thought in England, Ireland, Scotland, and the British Atlantic from ca. 1500 to ca. 1800. Looking at both classic and lesser-known primary texts and drawing on recent work in intellectual history, it pays special attention to how changing ideas about politics, economy, society, and history reflected both long-term developments and short-term crises in state-formation, imperial expansion, commercialization, the politics of religion, and new approaches to science.

HIST 345 *Postwar Japanese History* (3 credits)

Prerequisite: See N.B. number (1). This course examines Japan since the end of World War II. While tracing Japan's rise to the status of an economic power, this course focuses primarily on social and cultural history.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 346 *Sexuality in History* (3 credits)

Prerequisite: See N.B. number (1). This course looks at the topic of human sexuality taking a broad view, both in time (from the Ancient world to the 20th century) and space (featuring Asia and Africa as well as the Western world). Rather than surveying the impossibly large canvas of sex throughout world history, this course looks at a number of particular topics (e.g. marital sexuality, same-sex relationships, sexual violence) in different cultures.

HIST 347 *Gender and Sexuality in South Asia* (3 credits)

Prerequisite: See N.B. number (1). This course surveys the history of gender and sexuality in South Asia (India, Pakistan, and Bangladesh) from 1500 to the present, beginning in the Mughal period and concluding with an investigation of the post-colonial experience. Topics may include masculinity at the Mughal court, the European woman's imperial "burden," the regulation of sexuality in the Indian anti-colonial movement, the queer experience, identity formation in diaspora, and gender and religious fundamentalism.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 348 *History of Violence: Middle East 1798 – Present* (3 credits)

Prerequisite: See N.B. number (1). This course examines the multiple facets of violence in Middle Eastern historical contexts. The objective is to develop a critical approach for thinking about the nature of violence by using a historical perspective to complicate commonplace oppositions between its legitimate and illegitimate forms or its intelligibility and unintelligibility. Students explore the differences among state-sanctioned violence, resistance movements, and terrorism.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 350 *Medieval England* (3 credits)

Prerequisite: See N.B. number (1). This course examines the history of England between the Norman Conquest in 1066 and 1500. Topics include the political, social, and cultural impact of the Norman Conquest; Jews and the expulsion of 1290; knights and peasants; the Peasant's Revolt of 1381; crime and the Robin Hood legends; heresy and popular religion; urban culture and guilds.

HIST 352 *German History in the 20th Century* (3 credits)

Prerequisite: See N.B. number (1). This course studies the ideological, cultural, political, and socio-economic development of Germany from the First World War to the present.

HIST 353 *Colonial America and the Atlantic World* (3 credits)

Prerequisite: See N.B. number (1). This course explores the economic, political, and cultural history of the Atlantic world as a context for understanding developments in 17th- and 18th-century North America, including Native-European relations, migrations, religious controversies, slavery, revolts and independence movements.

HIST 354 *Revolutionary America* (3 credits)

Prerequisite: See N.B. number (1). This course examines themes and issues in the revolutionary and early national periods of American history.

HIST 355 *United States in the 19th Century, 1815–1850* (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life from the end of the War of 1812 to about 1850 — the intensification of sectionalism. Topics include geographic expansion and the beginnings of industrialization, the characteristics of southern slave society, and the rise of a system of political parties during the age of Jackson.

HIST 356 *United States in the 19th Century: The Era of the Civil War* (3 credits)

Prerequisite: See N.B. number (1). A study of American political, social, and economic life before and after the Civil War, from about 1850 to 1890. Topics include sectionalism and the breakdown of parties during the 1850s, the tasks of Reconstruction after the war, the New South, and the problems of a maturing industrial society.

HIST 357 *Foreign Relations of the United States to 1945* (3 credits)

Prerequisite: See N.B. number (1). This course provides an analysis of United States foreign policy from the American Revolution to the conclusion of the Second World War, emphasizing the domestic debate over foreign policy, national security, and economic development; commercial and territorial expansion; and the dynamics of Canadian-American relations.

HIST 358 *Foreign Relations of the United States, 1945 to the Present* (3 credits)

Prerequisite: See N.B. number (1). This is an historical investigation of United States foreign policy from the end of the Second World War to the present, emphasizing the United States' responses to the challenge of revolutions in Asia, Africa, Europe and Latin America, American conceptions of a new world order, the rise of the multinational corporation, globalization, terrorism, humanitarian intervention, and developments in Canadian-American relations.

HIST 359 *(also listed as SOCI 366)*

***The History and Sociology of Genocide to 1945* (3 credits)**

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to genocide up to 1945.

NOTE: Students who have received credit for SOCI 366 may not take this course for credit.

HIST 360 *(also listed as SOCI 367)*

***The History and Sociology of Genocide from 1945 to the Present* (3 credits)**

Prerequisite: See N.B. number (1). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1945 to the present.

NOTE: Students who have received credit for SOCI 367 may not take this course for credit.

HIST 362 *Traditional China* (3 credits)

Prerequisite: See N.B. number (1). This course examines Chinese history from its earliest emergence to the Ming dynasty in the mid-17th century. Emphasis is placed on China's political, intellectual, and cultural heritage.

HIST 363 *Africa in the 20th Century* (3 credits)

Prerequisite: See N.B. number (1). This course examines 20th-century African history. Beginning with the colonial conquests, the course traces the processes of social, cultural, and economic change that have shaped Africans' experience of colonial domination and postcolonial statehood. Emphasis is placed on the ways in which historical change has been interpreted in African cultural production.

HIST 364 *Modern South Asia* (3 credits)

Prerequisite: See N.B. number (1). British conquest established nearly two centuries of colonial rule over the world's oldest civilization. This course examines the nature of imperial control, the resistance of traditional leaders, European intellectual imperialism, Indian cultural and religious revivalism, and modern nationalism. Special attention is paid to M.K. Gandhi and Gandhism as well as to Muslim separatism and the Pakistan movement.

HIST 366 *Early Modern China* (3 credits)

Prerequisite: See N.B. number (1). This course examines Chinese history during the Qing dynasty (1644-1912), with emphasis on political, social, diplomatic, and intellectual issues.

HIST 367 *Modern China* (3 credits)

Prerequisite: See N.B. number (1). This course examines China's history since the fall of the Qing dynasty in 1912, with particular emphasis on the Nationalist and Communist revolutionary movements and on China's transformation since the establishment of the People's Republic of China in 1949.

HIST 368 *African Popular Culture* (3 credits)

Prerequisite: See N.B. number (1). This course explores the varied terrain of African popular culture in the 19th and 20th centuries. The materials examined in this course range broadly, including not only scholarly work, but also fiction, film, music, and images that provide entry points into the ways African artists, youth, officials, freedom fighters, market women, bachelors, gangsters, and others have engaged culturally with the world around them.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 369 *Middle East: Empire, Gender, and Sexuality in Modern Times* (3 credits)

Prerequisite: See N.B. number (1). This course examines the historical formation and intersection of three distinct phenomena: empire, gender, and sexuality. From the everyday practices of family life to the form of politics and the balance of geo-strategic relations, the 19th and 20th centuries witnessed a radical transformation of human organization within the Middle East and globally. Topics may include imperialism, state formation, nationalism, Orientalism, feminism, and Islam.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 370 *Japanese Popular Culture* (3 credits)

Prerequisite: See N.B. number (1). This course traces the history of Japanese popular culture from the 1600s to the present, with emphasis on the last 50 years. The major focus is on the evolution of Japanese popular media such as films, anime, and manga. Other themes such as youth culture, fashion, and the spread of Japanese popular culture outside of the country's borders are explored. No background knowledge or Japanese language skills are required.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 371 *History of the Russian Revolutionary Movement, 1825-1922* (3 credits)

Prerequisite: See N.B. number (1). This course traces the evolution of the Russian revolutionary movement from the Decembrist Revolt (1825) to the Bolshevik consolidation of power (1922). Emphasis is placed on the development of Russian conceptions of socialism, Marxism, and anarchism; the roles undertaken by women in various revolutionary groups; and the Russian contribution to the development of modern terrorism.

HIST 372 *Latin American History Via the Novel* (3 credits)

Prerequisite: See N.B. number (1). This course examines modern Latin American history and its representation by comparing "fictional" and "factual" depictions of key issues and significant events including economic imperialism, political revolution, and race relations. Texts such as Gabriel García Márquez's literary masterpiece *One Hundred Years of Solitude* are used.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 373 *The Pacific War* (3 credits)

Prerequisite: See N.B. number (1). This course explores the history of the Pacific War, from its origins in the expansion of the Japanese empire to the atomic bombings, Japan's surrender, and the shaping of postwar Asia. While covering battles, strategy and tactics, and the weapons of war, the course also looks at diverse themes such as home fronts, propaganda, and how the war has been remembered and represented since 1945.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 374 *Egypt and the World Since 1798* (3 credits)

Prerequisite: See N.B. number (1). This course explores the social, cultural, and political histories of Egypt between the Napoleonic conquest and the present. Special attention is paid to the formation of Egyptian national identity in a post-Ottoman international context.

HIST 376 *The Caribbean and the Atlantic World* (3 credits)

Prerequisite: See N.B. number (1). This course covers the period from post-Columbian contact to the late-19th century. Themes include the link between sugar and slavery; the slave trade and the emergence of plantation-based colonialism; racialized social and economic structures; slave resistance; the politics of abolition; alternative labour forms; and the rise of political movements.

HIST 377 *History of Russia, 1694-1917* (3 credits)

Prerequisite: See N.B. number (1). This course traces Russian history from the era of Peter the Great to the Bolshevik Revolution. Emphasis is placed on long-term trends that continue to affect Russia today such as political liberty, economic development, warfare and foreign affairs, and gender relations.

HIST 378 *History of the Soviet Union* (3 credits)

Prerequisite: See N.B. number (1). This course examines the main economic, social, and political developments of the history of the Soviet Union from its creation in 1917 to its collapse in 1991. Particular attention is paid to the Stalin era, the impact of World War II, and the Cold War.

HIST 379 *History through Visual Media and Material Culture* (3 credits)

Prerequisite: See N.B. number (1). Public encounters with history are increasingly mediated by television, film, the Internet, and museological experiences. This course explores the relationship between the public and the past by examining issues in the production, distribution, and reception of history via these new and changing technologies.

HIST 380 *History and Digital Media* (3 credits)

Prerequisite: See N.B. number (1). This course offers an introduction to the changes that new media and technologies are bringing to historical research, writing, presentation, and teaching of the past. The course begins with an overview of the history of the Internet and digital media, and then examines historical work on a variety of subjects — by scholars, teachers, archivists, museum curators, and popular historians — published on the web. Historical and critical readings provide the basis for the hands-on section of the course in which students develop pilot online history projects.

NOTE: Students who have received credit for this course under a HIST 387 number may not take this course for credit.

HIST 381 *History and Public Policy* (3 credits)

Prerequisite: See N.B. number (1). This course examines the uses of history and the role of the historian in the political, legal, and social arenas, focusing on cases in which the past has underwritten social movements or mediated public controversies. Topics may include professional work with government and non-governmental organizations, expert analyses and testimony before tribunals and truth commissions in human rights cases, Native land claims, reparations, restorative justice, and the repatriation of cultural artifacts.

HIST 382 *Age of Enlightenment* (3 credits)

Prerequisite: See N.B. number (1). This course surveys the intellectual and cultural history of Europe and the Atlantic World from the later 17th century through the 18th century.

HIST 383 *Age of Revolution* (3 credits)

Prerequisite: See N.B. number (1). This course focuses on the French political and English industrial revolutions and their consequences throughout Europe. Colonialism, slavery, and the Atlantic revolutions in the Americas are considered to the extent that they contributed to, or were influenced by, the revolutions in Europe.

HIST 384 *Age of Industrialization and Nationalism 1848-1914* (3 credits)

Prerequisite: See N.B. number (1). A study of the transformation of European society, economy, and politics in the years between the upheavals of the mid-19th century and the collapse of the traditional order in World War I.

HIST 385 *Age of Dictators: Europe, 1914-1945* (3 credits)

Prerequisite: See N.B. number (1). A study of the internal development and external relations of the nations of Europe from the Great War to the end of World War II. The course examines this chaotic age primarily through an investigation of the revolutionary and reactionary upheavals that kept Europe socially, politically, and economically unbalanced for 30 years.

HIST 386 *Contemporary Europe: 1945 to the Present* (3 credits)

Prerequisite: See N.B. number (1). A study of the internal development and external relations of the nations of Europe from the collapse of Nazi Germany to the present. The course concentrates on the divisions between East and West, the economic recovery of Europe and the effects of the energy crisis on social, economic, and political life throughout Europe.

HIST 387 *Selected Topics in Public History* (3 credits)

Prerequisite: See N.B. number (1). Specific topics for this course, and relevant prerequisites, will be stated in the Undergraduate Class Schedule.

HIST 388 *Telling Stories: Oral History, Memoryscapes and Digital Storytelling* (3 credits)

Prerequisite: See N.B. number (1). This course is an introduction to oral history theory, ethics, and practice, and surveys the many oral history projects underway in Montreal and around the globe.

HIST 389 *Ethnography: Doing Micro-History of the Present* (3 credits)

Prerequisite: See N.B. number (1). This course introduces basic tools of ethnographic research and documenting using both traditional and new media, with attention to ethical, political, interpersonal, and aesthetic issues.

HIST 391 *Independent Study Tutorial in History* (3 credits)

Prerequisite: See N.B. number (1). This course permits individual study, with a selected faculty member, in a specialized area not available among regular 300-level classes.

HIST 392 *France 1871 to the Present* (3 credits)

Prerequisite: See N.B. number (1). This course introduces students to the history of France from the Commune of 1871 to the Fifth Republic. This course deals with such issues as the Dreyfus Affair, the legacy of two World Wars in French history, the Vichy regime, collaboration and French fascism, the May events of 1968, and so forth. Political, social, and intellectual developments will be discussed.

HIST 393 *Vietnam War* (3 credits)

Prerequisite: See N.B. number (1). The protracted Vietnamese conflict in both its French (1940-54) and American (1955-75) phases is analyzed using lectures, audio-visual materials, documents, and soldiers' accounts. Vietnam's historical evolution and colonial experience are briefly discussed as essential to understanding the war as a military, political, and cultural struggle.

HIST 394 *Food in History* (3 credits)

Prerequisite: See N.B. number (1). This course considers the economic, political, and cultural changes in food production, diets and cuisines from 1700 to the present from a global, comparative perspective. Lectures, primary and secondary source readings, films, research and hands-on activities explore diverse topics such as hunting and gathering; cooking traditions and innovations; cultural and ethical dimensions of eating and fasting; agriculture and food markets; the politics of famine; factory farms, industrial processing, and nutritional science; the emergence of the restaurant, the supermarket, fast food; and the globalization of modern diets.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 395 *Environmental History* (3 credits)

Prerequisite: See N.B. number (1). This course surveys major themes and problems in global environmental history from the last ice age to the present, but focusing primarily on Europe, Africa, Oceania, and the Americas since 1500. Topics include the history of ideas about nature; climate change; the Columbian Exchange; the environmental impact of science, technology, population growth, and urbanization; the politics of conservation; and environmentalism.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

HIST 396 *The United States Since 1945* (3 credits)

Prerequisite: See N.B. number (1). The immediate historical background of today's America is the subject matter of this course. Major themes include civil rights, the rise of modern feminism, and economic change.

HIST 397 *History and Sound* (3 credits)

Prerequisite: See N.B. number (1). This course examines sound as a historical subject and a medium for understanding the past. Emphasizing aural rather than visual sources, it addresses a variety of topics including the history of aural art forms such as music and radio; sound recording and transmission technologies; commercial uses of sound; architectural acoustics; and the evolution of soundscapes. The course may include training in the production of radio documentaries, urban sound walks, and audio podcasts.

HIST 398 *Selected Topics in History* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

HIST 402 *The Philosophy and Practice of History* (3 credits)

Prerequisite: Approved honours standing in History, or permission of the Department. This course examines problems in the philosophy and practice of history. Particular attention is given to contemporary debates about history as a distinctive mode of understanding and explanation. This course is required of all honours students.

HIST 403 *Methodology and History* (3 credits)

Prerequisite: Approved honours standing in History, or permission of the Department. This course examines the variety of sources, methods, and modes of analysis used in the research and writing of history. It addresses both theoretical and practical aspects of method. This course is required of all honours students.

HIST 412 *Advanced Study in Canadian History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Canada. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 437 *Advanced Study in European History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Europe. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 452 *Advanced Study in American History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of the United States. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 457 *Advanced Study in Latin American and Caribbean History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in Latin American and/or Caribbean history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 462 *Advanced Study in Asian History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in Asian history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 467 *Advanced Study in Middle Eastern History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in Middle Eastern history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 471 *Advanced Study in African History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of Africa. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 475 *Advanced Study in the History of Gender and Sexuality* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in the history of gender and sexuality. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 477 *Advanced Study in the History of Human Rights and Justice* (3 credits)

Prerequisite: See N.B. number (2). This advanced seminar focuses on a selected topic in the history of human rights and justice. The emphasis is on encouraging students to conduct historical investigation independently, under a professor's supervision. The specific content may vary from year to year.

HIST 479 *Advanced Study in Women's History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in women's history. The emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 481 *Advanced Study in Public History* (3 credits)

Prerequisite: See N.B. number (2). Advanced seminar in a selected topic in public history. In addition to weekly discussions of relevant readings, the emphasis is on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content varies from year to year depending on the instructor.

HIST 485 *Public History Workshop* (3 credits)

Prerequisite: See N.B. number (2); HIST 306. This course offers students the opportunity to conceive, plan, and carry out a project that presents a historical subject to the public. Students receive training in the public presentation of the past through several media and to a variety of audiences, and are encouraged to involve relevant parties outside the academy in the development of their project.

HIST 486 *Public History Internship* (3 credits)

Prerequisite: See N.B. number (2); HIST 306. This internship in public history is designed to allow students to test and hone their skills in a non-academic situation. Placements will be arranged by the faculty member responsible for the course and may be drawn from various potential employment sectors: public, non-profit, and private. Students, in consultation with the employer and the faculty advisor, are expected to fully participate in the defining of their internships. Students work according to a detailed job description and devote a minimum of 100 hours to the fieldwork component of the internship, keep a logbook describing their work activities, and submit a 20-25 page written report that summarizes and evaluates their work experience, positioning it in relation to broader academic questions in the field of public history. The employers participate in the assessment of the intern's work. Students may find it useful to have second-language proficiency for the purposes of this internship.

HIST 491 *Individual Study Tutorial in History* (3 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 492 *Individual Study Tutorial in History* (6 credits)

Prerequisite: See N.B. number (2). This course permits an individual student to pursue advanced study, with a selected faculty member, in a specialized area not available among scheduled 400-level seminars.

HIST 493 *Honours Essay Tutorial* (6 credits)

Prerequisite: See N.B. number (2). This course is open only to honours students in History. The student works with an individual faculty member in a particular area of history. Students are asked to produce a sustained piece of written work, not exceeding 40 pages in length, to be read by their advisor and at least one other member of the Department.

HIST 498 *Advanced Topics in History* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.170

INTERDISCIPLINARY STUDIES

Administrator

JOANNE LOCKE, MLS McG.

For the complete list of faculty members, please consult the Department website.

Program Objectives

The Faculty of Arts and Science *Principles of Education* (§31.001) reinforce the value of broadening skills and experience beyond the boundaries of a single concentration. Interdisciplinary studies involves students in a range of thought, from scientific to humanistic. Courses are designed to illuminate principles, methods, and skills that cross disciplinary boundaries. These programs are intended for students whose interests do not conform to standard academic programs.

Program

INDIVIDUALLY STRUCTURED PROGRAMS — HONOURS OR SPECIALIZATION

Under the direction of the academic advisor, Faculty of Arts and Science

Admission

Opportunities are available in some departments and programs to follow an Individually Structured Specialization or Honours program. Students must apply to the Department that seems most relevant to the central aspect of their proposed program. Students in general must have demonstrated in their previous academic endeavours that they are capable of good standing ("B" level), but in exceptional cases a student may be admitted provisionally on the recommendation of the departmental undergraduate coordinator.

Formal entry to the ISP may occur only after completion of preparatory courses such as are required in Mature Entry and Extended Credit programs. Students wishing to follow an honours program must follow the Faculty procedures and regulations concerning admission to honours programs. (See Degree Requirements — Honours, §16.2.3 and 31.003.)

Students interested in pursuing an Individually Structured Program should contact the academic advisor, Faculty of Arts and Science, at 514-848-2424, ext. 2104.

Academic Regulations

The program will consist of not less than 60 credits. The courses chosen must be based on a departmental or program core, usually the major, but not less than 24 credits. Students will thus be required to complete necessary prerequisites, and general preparation courses such as Research Methods or Statistics, so that they may later follow a regular departmental program if they so desire.

A specialization student must maintain an average of "C+" in all specialization courses for purposes of continuation in the program from year to year, as well as for graduation. The minimum acceptable grade in any single specialization course is "C-."

The program of study must be worked out at the time of registration into the program. Admission to the program must be finalized before a student registers for the final 60 credits of the 90-credit portion of their degree. To allow for the non-availability of certain courses during certain sessions, allowable substitute courses must be listed in advance. Such substitution provisions will be necessary only in the case of specialized courses that are known not to be available on a session by session basis. The intention of this regulation is to assure that the program does not become an ad hoc mixture of courses without clearly rationalized academic coherence.

Students must prepare a careful, not necessarily long, statement of their goals indicating the specific reasons for their program choice. The rationale and the sequence of courses chosen must be approved by the two departmental program coordinators and the Associate Dean, Student Academic Services.

Programs

INTERDISCIPLINARY PROGRAMS — MINORS AND CERTIFICATES

Interdisciplinary minor programs usually consist of 24 or more credits and are to be combined with a department major, specialization, or honours. Interdisciplinary certificate programs normally consist of 30 credits and can be taken as independent programs. Interdisciplinary minor and certificate programs are listed below.

Credits	Title	Cal. Sec.
30	Certificate in Arts and Science	31.170
27	Minor in Interdisciplinary Studies in Sexuality	31.170

Program

CERTIFICATE IN ARTS AND SCIENCE

The Certificate in Arts and Science is a *non-degree program* that caters to students who qualify for undergraduate degree programs, but whose preference is to follow a shorter program of study. It may also be of interest to those who already have an undergraduate degree, but wish to update their knowledge or learn new skills.

The certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science.

Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Students who are admitted to the Certificate in Arts and Science, and who wish to continue in a degree program, should apply for admission to their program within the first 30 credits.

For advising assistance, students should contact Student Academic Services at 514-848-2424, ext. 2104.

Program

INTERDISCIPLINARY STUDIES IN SEXUALITY

The Minor in Interdisciplinary Studies in Sexuality, offered jointly by the Faculty of Fine Arts and the Faculty of Arts and Science, draws its curriculum from a variety of disciplines. Its purpose is to investigate empirical, theoretical, and creative aspects of sexuality.

Students interested in this program should contact Dr. Frances Shaver, Chair, Department of Sociology and Anthropology and Dr. Thomas Waugh, Professor, Mel Hoppenheim School of Cinema.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

27 Minor in Interdisciplinary Studies in Sexuality

12 Chosen from INTE 270/FFAR 290⁶, INTE 275/FASS 291³, INTE 392/FASS 392³; SOCI 375/ANTH 375^{3*}; FMST 392³

9 Elective credits on sexuality and sexual orientation chosen in consultation with the program coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses:
AHSC 312³; ENGL 393³; FMST 391³; RELI 380³; WSDB 383³.

6 Chosen each year from courses in gender and women's studies in consultation with the program coordinator from a list of available offerings within departments of the Faculties of Arts and Science and Fine Arts.

**Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.*

NOTE: For details on the course descriptions in the program listed above, please refer to the individual departmental course listings, and the INTE courses listed below.

Elective Groups

Elective Groups (formerly referred to as Clusters) are elective courses (15 to 18 credits) on a theme. Each group provides multidisciplinary and interdisciplinary course content.

Credits	Elective Groups
18	Canadian Studies (<i>Admission suspended for 2013-14</i>)
18	Health and Lifestyle
18	Hellenic Studies
18	Introduction to Life Sciences
18	Legal Studies
15	Marketing
18	Native Studies
18	Quebec Studies
18	Spanish America
18	Preparing for Success in the Workplace: Skills, Issues and Practices
18	The Planet Earth: Studies in the Environment
15	Understanding Western Myth
15	The Basics of Business

Course information on these Elective Groups is listed in the Undergraduate Class Schedule and on the University website at www.concordia.ca.

Interdisciplinary Courses

Many courses which have an interdisciplinary approach and are recommended and/or required by a variety of departments are listed in this section.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

INTE 270 (also listed as FFAR 290)

***HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic* (6 credits)**

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

NOTE: Students who have received credit for FFAR 290, FFAR 390, INTE 390, or for this topic under an FFAR 398, INTE 398, or SOCI 399 number, may not take this course for credit.

INTE 275 (also listed as FASS 291)

***Introduction to Sexuality Research* (3 credits)**

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences. Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

NOTE: Students who have received credit for FASS 291, FASS 391, or INTE 391 may not take this course for credit.

INTE 290 Introduction to Computer Usage and Document Design (3 credits)

This course teaches students how to use the latest Windows operating system in combination with Microsoft Office applications and how to use these tools to produce attractive, efficient, and informative documents. Basic notions of word processing, document design, data organization, and presentation are explored. The course is based on a step-by-step learning process, whereby students acquire the tools that they need to accomplish a specific task. A minimum of 40 hours of laboratory work is required.

NOTE: Computer Science students, or students enrolled in Mathematics and Statistics programs, may not take this course for credit.

NOTE: Students who have received credit or exemption for DESC 200 may not take this course for credit.

INTE 291 Web Document Development (3 credits)

Prerequisite: INTE 290 or equivalent. This course introduces students to web document development in a networked PC environment. Students learn how to create web documents, scripts, and animation using a variety of web development, scripting, and animation tools. The course format is a mix of lectures, hands-on experience in the computer laboratory, and text. A minimum of 40 hours of laboratory work is required.

INTE 293 Computer Application Development (3 credits)

This course introduces students to the use of contemporary computer tools in scientific applications. It is designed for students with some familiarity with the fundamentals of computing who wish to use computers as tools for research within science disciplines. The format is largely self-instructional, using computer-based tutorial packages. A minimum of 40 hours of laboratory work is required.

INTE 296 Discover Statistics (3 credits)

This course introduces students to the basics of statistics and is aimed at mastering the elementary analytical concepts of the subject. Topics include descriptive statistics, correlation and regression analysis, experimental analysis (test procedures), probability (distribution and theory), hypothesis testing, and analysis of variance.

NOTE: Students who have received credit for this topic under an INTE 298 number may not take this course for credit.

NOTE: See §200.7 for equivalent statistics courses.

INTE 298 Special Topics (3 credits)

INTE 299 Special Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INTE 392 (also listed as FASS 392)

***Queer Theory* (3 credits)**

Prerequisite: 30 credits. An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

NOTE: Students who have received credit for FASS 392 may not take this course for credit.

INTE 398 ***Special Topics*** (3 credits)

INTE 399 ***Special Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

INTE 498 ***Special Topics*** (3 credits)

INTE 499 ***Special Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.180 JOURNALISM

Faculty

Chair

LINDA KAY, MA C'dia., Associate Professor

Distinguished Professor Emeritus

ENN RAUDSEPP, PhD McG.

Professor

MIKE GASHER, PhD C'dia.

Associate Professors

BRIAN GABRIAL, PhD Minn.

DAVID SECKO, PhD Br.Col.

Assistant Professors

ANDREA HUNTER, PhD Qu.

LISA LYNCH, PhD Rutgers

JAMES McLEAN, PhD C'dia

Senior Lecturer

PETER DOWNIE, BA New Br.,

Lecturers

JACQUES GRENIER, BA Laval

CORINNE SMITH, MJ Car.

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Communication Studies and Journalism Building, Room: CJ 3.230

514-848-2424, ext. 2465

Email: sandy@alcor.concordia.ca

Department Objectives

Journalism studies are designed to help students become the intelligent and versatile reporters and writers upon which society depends for the exercise of its democratic functions. Above all, journalism is an intellectual activity with rigorous standards for gathering, processing, and disseminating information. To help students become knowledgeable and versatile reporters and writers, the Department of Journalism offers a professional education that combines theory and practice.

Writing and production workshops emphasize the practical, simulating the assignments of working journalists. Newsroom standards are universally applied. Complementing these courses are lectures and seminars which analyze the social and political contexts in which journalism is practised.

Admission and Graduation Requirements

Enrolment in the workshops in the Department of Journalism is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs. All applicants should apply through the Concordia University Admissions Application Centre. Applicants must also submit a separate application to the Department by March 1 to make an appointment for a test of English proficiency. More information can be found at journalism.concordia.ca/undergraduateprograms. A student must achieve a final mark of "C" or better in the reporting workshops in order to proceed to the next level.

To graduate with a Major or Specialization in Journalism, a student must demonstrate a working knowledge of French. Tests of oral proficiency in French are administered by the Département d'études françaises on behalf of the Department of Journalism, which is responsible for the final evaluation of each student's competence.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

These programs are designed to prepare graduates for the English-language media.

A limited number of students who have been admitted to the Major in Journalism program may be allowed to register in the Science College, with a view to combining a basic understanding of science with a training in journalism.

60 BA Specialization in Journalism/Textual

Stage I

18 JOUR 201⁶, 202³, 205³, 221⁶

Stages II & III

15 JOUR 302³, 303³, 309³, 316³, 366³

9 JOUR 404³, 428³, 444³

6 Chosen from JOUR 402³, 420³, 435³, 436³, 437³, 442³, 450³, 451³, 460³, 463³, 498³

12 General-Knowledge Credits

Category 1: Politics and History

3 Chosen from HIST 205³; POLI 204³, 351³, 356³

Category 2: Society and Culture

3 Chosen from ENGL 233³; PHIL 201³, 210³; RELI 214³; SOCI 203³

Category 3: Economics

3 Chosen from ECON 201³, 203³, 252³

Category 4: Science

3 Chosen from BIOL 200³; CHEM 208³, 209³; INTE 296³

60 BA Specialization in Journalism/Audiovisual

Stage I

18 JOUR 201⁶, 202³, 205³, 221⁶

Stages II & III

15 JOUR 302³, 316³, 321³, 330³, 366³

9 JOUR 421³, 428³, 444³

6 Chosen from JOUR 402³, 420³, 432³, 435³, 436³, 437³, 442³, 450³, 451³, 460³, 463³, 498³

12 General-Knowledge Credits

Category 1: Politics and History

3 Chosen from HIST 205³; POLI 204³, 351³, 356³

Category 2: Society and Culture

3 Chosen from ENGL 233³; PHIL 201³, 210³; RELI 214³; SOCI 203³

Category 3: Economics

3 Chosen from ECON 201³, 203³, 252³

Category 4: Science

3 Chosen from BIOL 200³; CHEM 208³, 209³; INTE 296³

72 BA Specialization in Journalism/Multi-Platform

Stage I

18 JOUR 201⁶, 202³, 205³, 221⁶

Stage II

21 JOUR 302³, 303³, 309³, 316³, 321³, 330³, 366³

Stage III

12 JOUR 404³, 421³, 428³, 444³

9 Chosen from JOUR 402³, 420³, 432³, 435³, 436³, 437³, 442³, 450³, 451³, 460³, 463³, 498³

12 General-Knowledge Credits

Category 1: Politics and History

3 Chosen from HIST 205³; POLI 204³, 351³, 356³

Category 2: Society and Culture

3 Chosen from ENGL 233³; PHIL 201³, 210³; RELI 214³; SOCI 203³

Category 3: Economics

3 Chosen from ECON 201³, 203³, 252³

Category 4: Science

3 Chosen from BIOL 200³; CHEM 208³, 209³; INTE 296³

45 BA Major in Journalism

NOTE: To graduate with a Major in Journalism students are required to complete a minor or a major in another subject.
Stage I

18 JOUR 201⁶, 202³, 205³, 221⁶

Textual Option

Stage II

15 JOUR 302³, 303³, 309³, 316³, 366³

Stage III

9 JOUR 404³, 428³, 444³

3 Chosen from JOUR 402³, 420³, 435³, 436³, 437³, 442³, 450³, 451³, 460³, 463³, 498³

Audiovisual Option

Stage II

15 JOUR 302³, 316³, 321³, 330³, 366³

Stage III

9 JOUR 421³, 428³, 444³

3 Chosen from JOUR 402³, 420³, 432³, 435³, 436³, 437³, 442³, 450³, 451³, 460³, 463³, 498³

Courses

Written work in writing and reporting workshop courses is in English; please consult the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

JOUR 201 **Introduction to Journalism: Text** (6 credits)

Prerequisite: Enrolment in a Journalism program. This course lays the foundation for all subsequent reporting and writing courses. Students learn how to do library and online research, structure and conduct interviews, and write news and feature stories for print and online outlets. Emphasis is placed on reporting stories in the community. Practical out-of-class assignments use the city of Montreal as a laboratory.

JOUR 202 **Digital Tools for Journalists** (3 credits)

Prerequisite: Enrolment in a Journalism program. Students are introduced to a range of basic tools and concepts in multimedia journalism, from basic HTML and web design to the use of web 2.0 tools to author and publish video, audio, and still photography online.

JOUR 205 **Principles of Journalistic Thought and Practice** (3 credits)

This course provides a survey of the foundational ideas about journalism and its role in society, from the time of an emergent press to the present. It addresses received ideas about journalism's place in democratic society as well as current critical thought.

JOUR 210 **The Media in Quebec** (3 credits)

This course considers the current reality of the Quebec news media as they have been informed by the history of journalism in Quebec. The course situates the media in Quebec within broader philosophical and sociological currents informing the understanding of journalism as an institution. Some of the reading material for this course is in French.

NOTE: Students who have received credit for JOUR 305 may not take this course for credit.

JOUR 215 **Contemporary News Media** (3 credits)

This course introduces students to the increasingly complex structures of modern media, and considers them in the context of journalism ideals. It examines the organizations, practices and problems of news media, focusing on key functions in day-to-day activities. In any given year, it may explore in detail a particular development or problem in the news media.

JOUR 221 **Introduction to Journalism: Audiovisual** (6 credits)

Prerequisite: Enrolment in a Journalism program. This course introduces students to the fundamentals of news across audio and visual platforms (radio, television, and online journalism); focusing on research, story development, writing, recording and editing. It also introduces students to the historical development of radio and television in Canada.

NOTE: Students who have received credit for JOUR 200 or 203 may not take this course for credit.

JOUR 298 **Special Topics in Journalism** (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 302 **Research Methods for Journalism** (3 credits)

Prerequisite: JOUR 201, 221. This course introduces students to research methods with a particular focus on primary sources, such as official documents, legal and financial records, access-to-information requests, electronic databases, as well as in-depth interviews. These methods are treated as both sources of story ideas and as essential elements of good reporting.

JOUR 303 *Feature Writing* (3 credits)

Prerequisite: JOUR 201, 221. This course is designed to help students develop and enhance their writing abilities, preparing for the broadest range of journalistic feature writing, from brief colour stories and profiles to in-depth articles. It consolidates interview techniques and introduces a variety of writing approaches.

JOUR 309 *Copy-Editing and Layout* (3 credits)

Prerequisite: JOUR 201, 221. This course develops students' copy-editing skills and introduces them to the fundamentals of page layout. While the editing component of the course is designed primarily for students in textual journalism, the techniques employed are applicable to all media forms.

JOUR 316 *Law and Ethics in Journalism* (3 credits)

Prerequisite: JOUR 201, 221. This course looks at issues and practices in journalism within the contexts of law and ethics. It aims to provide students with an understanding of professional standards and legal norms, together with a strong foundation in ethical reasoning.

NOTE: Students who have received credit for JOUR 317 or COMS 453 may not take this course for credit.

JOUR 318 *Publication Workshop* (3 credits)

Prerequisite: JOUR 201. Students experiment, under supervision, with concepts and practical applications of computerized print media layout and design at an advanced level while creating publications in a variety of formats.

NOTE: Students who have received credit for JOUR 408 or for this topic under a JOUR 498 number may not take this course for credit.

JOUR 319 *Computer-Assisted Reporting* (3 credits)

Prerequisite: JOUR 201, or permission of the Department. Students develop advanced skills in computer-assisted reporting, working with a variety of software and data storage systems to research, analyze and publish their work. The goal is to equip students with the skills necessary to be successful journalists in the information age.

NOTE: Students who have received credit for JOUR 419 or for this topic under a JOUR 498 number may not take this course for credit.

JOUR 321 *Video Journalism* (3 credits)

Prerequisite: JOUR 201, 221. This workshop course advances videography skills introduced in JOUR 221. Students refine reporting, writing, recording and editing skills in a production context.

NOTE: Students who have received credit for JOUR 336 or 339 may not take this course for credit.

JOUR 330 *Radio Newsroom* (3 credits)

Prerequisite: JOUR 221. This course seeks to replicate the working conditions and journalistic expectations of a radio newsroom. Students assume various journalistic positions including assignment editor, reporter, and newsreader, working to deadline to produce a live radio newscast.

JOUR 336 *Introduction to Television* (3 credits)

Prerequisite: JOUR 221. This is a workshop course in the fundamentals of videography, where students learn the techniques of video recording and editing, as well as how to write effectively to complement images, and how to organize and perform field and post-production functions.

NOTE: Students who have received credit for JOUR 415 may not take this course for credit.

JOUR 339 *Intermediate Television Journalism* (3 credits)

Prerequisite: JOUR 336. This course is a continuation of JOUR 336. Students learn the various production methodologies used in putting together a weekly television news and current-affairs program, and work on perfecting editing skills using more sophisticated TV-editing software.

JOUR 343 *Broadcast Public Affairs* (3 credits)

Prerequisite: JOUR 201, or permission of the Department. This course focuses on the principles, practices, and issues in Canadian and American public affairs radio and television, with a comparative look at broadcasting around the world.

NOTE: Students who have received credit for COMS 340, 342 or 343 may not take this course for credit.

JOUR 366 *Photojournalism* (3 credits)

Prerequisite: JOUR 201, 221. This is a workshop in the fundamentals of photojournalism, where students learn how to apply the theory and aesthetics of news photography to telling stories through pictures. Using digital cameras and technology, students perform a variety of exercises and assignments to help them master the techniques used in planning, taking, and laying out news photographs.

NOTE: Students who have received credit for JOUR 466 may not take this course for credit.

JOUR 398 *Special Topics in Journalism* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

JOUR 400 *Advanced Reporting* (3 credits)

Prerequisite: JOUR 302 or 303. Students are introduced to several areas of specialist reporting including business and editorial writing, and to a variety of journalistic treatments.

NOTE: Students who have received credit for JOUR 401 may not take this course for credit.

JOUR 402 *Specialist Reporting* (3 credits)

Prerequisite: JOUR 302 and 303; or permission of the Department. This workshop course focuses on a specified topic area each term (identified in the Undergraduate Class Schedule). It introduces students to the "beat," the particular research, reporting, and analytical demands of the specialty topic and the institutions which form the basis of this reporting specialty.

JOUR 404 *Magazine Writing* (3 credits)

Prerequisite: JOUR 302, 303. This workshop is designed for those students who want to further develop a set of research and writing skills geared specifically to the magazine market. Students produce magazine articles of publishable quality and shape the stories to fit the needs of a particular magazine by studying the overall market in depth.

JOUR 420 *Gender and Journalism* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course focuses on gender issues in journalism, ranging from the historical context to more contemporary material. It addresses the ways in which gender affects journalism as both a practice and an institution.

NOTE: Students who have received credit for JOUR 320 or for this topic under a JOUR 398 number may not take this course for credit.

JOUR 421 *Advanced Television Journalism* (3 credits)

Prerequisite: JOUR 321. This workshop focuses on how to produce a television news and current affairs program. Students produce a weekly television program and learn to work as part of a news team by performing all the functions behind and in front of the camera.

JOUR 428 *Multi-Platform Journalism* (3 credits)

Prerequisite: JOUR 202, 302. This course further explores the theory and practice of the authoring and online publication of text, audio, video and informational graphics. Working in groups, students create multimedia "packages" and work collectively to publish an online presentation of class work at the end of the term.

NOTE: Students who have received credit for this topic under a JOUR 498 number may not take this course for credit.

JOUR 432 *Documentary Journalism* (3 credits)

Prerequisite: JOUR 339. This course is for students who wish to explore long-form journalism in sound and pictures, in particular, the television current-affairs documentary. Through assignments, class discussions, and exposure to notable examples of the form, students learn the fundamentals of documentary production including story development and treatment, cinematographic style, interviewing, editing, and presentation.

JOUR 435 *Alternative News Media* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course considers the alternative news organizations in a variety of media forms. It examines both historical and present-day examples in the context of an expanding and diversifying mediascape.

NOTE: Students who have received credit for this topic under a JOUR 298 number may not take this course for credit.

JOUR 436 *Citizen Journalism* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course considers the challenges to mainstream journalism and addresses the particularities of citizen journalism, including its sourcing and presentation strategies, and organizational structures. Students learn how to apply basic technologies involved in citizen journalism.

NOTE: Students who have received credit for this topic under a JOUR 398 number may not take this course for credit.

JOUR 437 *Turning Points in Journalism History* (3 credits)

Prerequisite: JOUR 205. By concentrating on seminal moments reflected in a range of news media forms, this course examines technological, sociocultural, political, and historical trends that have contributed to journalism's development as a set of complex practices. Special attention is given to innovative journalists who have advanced the field.

NOTE: Students who have received credit for JOUR 332 may not take this course for credit.

JOUR 442 *International Journalism* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course examines cross-cultural journalism practices as they pertain to both international news coverage and local reportage in a multicultural setting. The course asks students to apply basic theoretical concepts to concrete case studies of the news.

JOUR 444 *Critical Approaches to Journalism* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course introduces students to a scholarly critique of journalism, both as a practice and as an institution. By interrogating specific readings, students are encouraged to consider the journalist as a cultural producer operating within overlapping social, political, and economic contexts.

JOUR 450 *Independent Study* (3 credits)

Prerequisite: 60 credits and enrolment in a Journalism program. Students who have demonstrated ability may, near the end of their program, undertake an independent study on a topic not otherwise covered by the program, under the direction of one or more faculty members.

JOUR 451 *Journalism Practicum* (3 credits)

Prerequisite: 60 credits and enrolment in a Journalism program. Students who have demonstrated ability, near the end of their program, undertake a practicum at a recognized media outlet, under the supervision of a senior journalist and with permission of the Department's undergraduate program director.

NOTE: Students who have received credit for JOUR 450 may take this course for credit.

JOUR 460 *Technical Writing and Business Communication* (3 credits)

Prerequisite: 60 credits or permission of the Department. This is a writing workshop in which students learn a range of writing styles and modes used by freelance journalists in technical writing and business communication. Among other assignments, students learn how to build up a press kit, including press releases, backgrounders, and fact sheets.

NOTE: Students who have received credit for this topic under a JOUR 498 number may not take this course for credit.

JOUR 463 *Literary Journalism* (3 credits)

Prerequisite: 60 credits or permission of the Department. This course explores the literary value of selected, seminal journalistic writings by examining the work of journalists, both past and present, as well as other non-fiction writers, including those in Canada, U.S., U.K., and elsewhere. Students will appreciate how literary styles and conventions can enhance journalistic practices.

JOUR 498 *Advanced Special Topics in Journalism* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty

Chair

YOGENDRA P. CHAUBEY, PhD *Roch.*, *Provost's Distinction*, Professor

Associate Chair

HARALD W. PROPPE, PhD *McG.*, Professor

Professors

SYED T. ALI, PhD *Roch.*

ABRAHAM J. BOYARSKY, PhD *McG.*

CHRISTOPHER J. CUMMINS, PhD *S'ton.*

CHANTAL DAVID, PhD *McG.*

JOSÉ GARRIDO, PhD *Wat.*

PAWEL GORA, PhD DSc *Warsaw*

RICHARD L. HALL, PhD *Lond.*

JOHN HARNAD, DPhil *Oxf.*, *Provost's Distinction*

ADRIAN IOVITA, PhD *Boston*

HERSHY KISILEVSKY, PhD *M.I.T.*

DMITRY KOROTKIN, PhD *Steklov Math.Inst.*

ROBERT RAPHAEL, PhD *McG.*

ALEXANDER SHNIRELMAN, PhD *Moscow State*

ANNA SIERPINSKA, PhD *Krakow*

RONALD J. STERN, PhD *Northwestern*

FRED E. SZABO, PhD *McG.*

FRANCISCO THAINE, PhD *IMPA, Rio de Janeiro*

Associate Professors

MARCO BERTOLA, PhD *Sissa*

JOSEF BRODY, PhD *Car.*

G. ELIE COHEN, PhD *McG.*

GALIA DAFNI, PhD *Prin.*

PATRICE GAILLARDETZ, PhD *Tor.*

CODY HYNDMAN, PhD *Wat.*

LEA POPOVIC, PhD *Calif. (Berkeley)*

ARUSHARKA SEN, PhD *I.Stat.I.*

ALINA STANCU, PhD *Roch.*

WEI SUN, PhD *Chinese Acad.Sci.*

XIAOWEN ZHOU, PhD *Calif. (Berkeley)*

Assistant Professors

NADIA HARDY, PhD *C'dia.*

ALEXEY KOKOTOV, PhD *Steklov Math.Inst.*

MÉLINA MAILHOT, PhD *Laval*

Lecturers

ARMEN ATOYAN, PhD *Moscow Eng-Physics Inst.*

EWA DUMA, PhD *Warsaw*

DEBARAJ SEN, PhD *C'dia.*

Affiliate Professors

JOHN DENTON, PhD *Harv.*

ANDREW GRANVILLE, PhD *Qu.*

HENRY HUNG, PhD *McG.*

BENOIT LAROSE, PhD *Montr.*

LENNAERT VAN VEEN, PhD *Utrecht*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
J.W. McConnell Building, Room: LB 901
514-848-2424, ext. 3223

Department Objectives

The Department of Mathematics and Statistics provides the general mathematical culture necessary for training those who will either be using the tools of mathematics or statistics in their work or who will become future mathematicians or statisticians. For students who are contemplating graduate work in mathematics or statistics, the Department has leading researchers in the fields of actuarial mathematics, applied probability, computational algebra, differential geometry, dynamical systems, mathematical physics, mathematics education, number theory and statistics.

In addition to its co-op program, alternating work and academic terms, the Department offers a program in Actuarial Mathematics and prepares students for the associateship examinations of the Society of Actuaries and the Casualty Actuarial Society.

The Department also provides instruction at the remedial and introductory levels to enable students who have been out of school for some time to re-enter the academic stream; and offers special courses for teachers of mathematics who wish to keep abreast of recent ideas and applications.

Programs

Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).

A student wishing to follow a program in the Department of Mathematics and Statistics but not meeting the entrance requirements should consult with one of the Department's academic advisors.

By careful choice of electives, students can select whether the emphasis of the program will be in the area of Actuarial Mathematics, Mathematical and Computational Finance, Pure and Applied Mathematics, or Statistics through specialization/honours programs in the respective areas.

The enrolment in specialization/honours will be on a selective basis, whereas the major will be open to all students. However, students with less than a 70% average in Cegep Mathematics courses will be required to take a six-credit "transition" Calculus and Linear Algebra course (MAST 214) upon entry into the MATH/STAT Major. The course will not count for credits in the major.

Students in a Mathematics and Statistics program may not take any of the following courses for credit: EMAT 212, 232, 252, 271.

Students wishing to take other Engineering Mathematics courses for credit must obtain prior approval of the Department.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

66 BA or BSc Honours in Actuarial Mathematics

27 MATH 251³, 252³, 264³, 265³, 354³, 364³, 365³; STAT 249³, 250³

30 ACTU 256³, 257³, 357³, 457³, 458³, 459³; STAT 349³, 360³, 460³, 461³

3 Chosen from ACTU 286¹, 386², 486²; MAST 232³, 332³; STAT 287¹, 388²

6 Honours project ACTU 493

60 BA or BSc Specialization in Actuarial Mathematics

27 MATH 251³, 252³, 264³, 265³, 354³, 364³, 365³; STAT 249³, 250³

30 ACTU 256³, 257³, 357³, 457³, 458³, 459³; STAT 349³, 360³, 460³, 461³

3 Chosen from ACTU 286¹, 386², 486²; MAST 232³, 332³; STAT 287¹, 388²

90 BA or BSc Specialization in Actuarial Mathematics/Finance

27 MATH 251³, 252³, 264³, 265³, 354³, 364³, 365³; STAT 249³, 250³

30 ACTU 256³, 257³, 357³, 457³, 458³, 459³; STAT 349³, 360³, 460³, 461³

3 Chosen from ACTU 286¹, 386², 486²; STAT 287¹

21 ECON 201³, 203³; COMM 220³, 308³; ACCO 230³; FINA 385³, 395³

9 Chosen from 400-level Finance courses

90 BA or BSc Specialization in Mathematical and Computational Finance

6 MACF 401³, 402³

24 MATH 251³, 252³, 264³, 265³, 364³, 365³, 370³, 473³

18 STAT 249³, 250³, 349³, 360³, 460³, 461³

12 Chosen from MACF 491³, 492³; MATH 361^{3†}, 464³, 467³, 478³, 479³; STAT 449³, 450³, 452³

24 ACCO 230³; COMM 220³, 308³; ECON 201³, 203³; FINA 385³, 395³, 412³

3 Chosen from FINA 411³, 413³, 455^{3*}, 465³

3 COMP 218³ or 248³

[†]NOTE: Students electing to include MATH 361 in their program are normally expected to plan to take MATH 478 and FINA 411 in order to focus on Portfolio Management and Optimization as an area of the Mathematical and Computational Finance discipline.

*NOTE: FINA 455 may only be included with prior departmental approval. The topic must be related to an area of the Mathematical and Computational Finance discipline.

66 BA or BSc Honours in Pure and Applied Mathematics

30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³

15 MAST 232³; MATH 366³, 369³, 370³, 464³

9 Chosen from MATH 467³, 470³, 471³, 473³, 474³, 475³, 478³, 479³; STAT 449³, 452³

6 MATH/STAT chosen with prior departmental approval

6 Honours project MATH 496

60 BA or BSc Specialization in Pure and Applied Mathematics

30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³

15 MAST 232³; MATH 366³, 369³, 370³, 464³

9 Chosen from MATH 467³, 470³, 471³, 473³, 474³, 475³, 478³, 479³; STAT 449³, 452³

6 MATH/STAT chosen with prior departmental approval

66 BA or BSc Honours in Statistics

30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³

12 MATH 370³; STAT 349³, 360³, 450³

6 Chosen from MATH 464³, 467³, 478³, 479³; STAT 449³, 452³, 460³, 461³, 480³ or DESC 445³

3 Chosen from MAST 232³, 333^{3*}; MATH 366³; STAT 287¹, 388²

9 MATH/STAT chosen with prior departmental approval

6 Honours project STAT 499

60 BA or BSc Specialization in Statistics

30 MATH 251³, 252³, 264³, 265³, 354³, 361³, 364³, 365³; STAT 249³, 250³

12 MATH 370³; STAT 349³, 360³, 450³

6 Chosen from MATH 464³, 467³, 478³, 479³; STAT 449³, 452³, 460³, 461³, 480³ or DESC 445³

3 Chosen from MAST 232³, 333^{3*}; MATH 366³; STAT 287¹, 388²

9 MATH/STAT chosen with prior departmental approval

42 BA or BSc Major in Mathematics and Statistics

33 COMP 218³ or 248³; MAST 217³ or COMP 232³; MAST 218³, 219³, 221^{3*}, 224³, 232³, 234³, 235³, 331³, 333^{3*}

3 Chosen from MAST 330³, 332³

3 Chosen from MAST 223^{3*}, 334³, 335³, 397³, 398³

3 Chosen with prior departmental approval*

*NOTE: This category may also include any other courses in the ACTU/MATH/STAT discipline, or certain courses in COMP or PHYS. It is not intended to include courses unrelated to the mathematical disciplines.

78 BA or BSc Joint Major in Mathematics and Statistics and Computer Applications

Mathematics and Statistics Component

42 COMP 248³; MAST 217³ or COMP 232³; MAST 218³, 219³, 221³ or COMP 233³; MAST 224³, 232³, 234³, 235³, 331³, 332³ or COMP 367³; MAST 333^{3*}, 334³ or COMP 361³; MATH 339³

Computer Science Component

(see §71.85)

32 COMP 228³, 249³, 335³, 346⁴, 348³, 352³, 354⁴, 465³; ENCS 282³, 393³

4 Chosen from COMP courses with numbers 325 or higher; SOEN 287³, 321³, 387³, 422³, 423⁴, 487⁴

NOTE: The Faculty of Arts and Science and the Faculty of Engineering and Computer Science have created a program of study which combines a comprehensive education in computer science and mathematics. This program resides in both Faculties. In the Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science, Computer Applications Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Science program, or Bachelor of/Baccalaureate in Arts program or a Bachelor of/Baccalaureate in Computer Science program. The Computer Science program is described in §71.85.

24 Minor in Mathematics and Statistics

18 MAST 217³, 218³, 219³, 221^{3*}, 224³, 333^{3*}

6 MATH/STAT chosen with prior departmental approval from MAST 223^{3*}, 232³, 234³, 235³, 330³, 331³, 332³, 334³, 335³, 397³, 398³

*NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Students taking a double Major or a Minor in Mathematics and Statistics and whose other program requires statistics courses should consult the Mathematics and Statistics undergraduate program advisor.

Mathematics and Statistics Co-operative Program

Director
SYED T. ALI, Professor

The Mathematics and Statistics co-operative program is offered to students who are enrolled in the BA or BSc honours or specialization programs. Students interested in applying for the Mathematics and Statistics co-op should refer to §24 where a full description of the admission requirements is provided.

Academic content is identical to that of the regular program, but six study terms are interspersed with four work terms.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Mathematics and Statistics co-op committee, which includes the student's advisors.

Please refer to §24 for the schedule of study and work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Actuarial Mathematics

ACTU 256 *Mathematics of Finance* (3 credits)

Prerequisite: MATH 264 previously or concurrently; and permission of the Department. Measurement of interest; annuities and perpetuities; amortization and sinking funds; rates of return; bonds and related securities; life insurance.

NOTE: Students who have received credit for MATH 326 may not take this course for credit.

NOTE: Only three credits will be awarded from ACTU 256; MAST 335.

ACTU 257 *Actuarial Mathematics I* (3 credits)

Prerequisite: ACTU 256. Measurement of mortality; pure endowments; life insurance; net single premiums; life annuities; net annual premiums; special topics.

NOTE: Students who have received credit for MATH 327 may not take this course for credit.

ACTU 286 *Actuarial Mathematics Lab I* (1 credit)

This lab features problem-solving sessions for the professional examination on financial mathematics of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 229 may not take this course for credit.

ACTU 357 *Actuarial Mathematics II* (3 credits)

Prerequisite: ACTU 257. Net level premium reserves; multiple life functions; multiple decrements, the expense factor; special topics.

NOTE: Students who have received credit for MATH 427 may not take this course for credit.

ACTU 386 *Actuarial Mathematics Lab II* (2 credits)

This lab will feature the use of programming languages and software applications.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

ACTU 456 *Pension Mathematics* (3 credits)

Prerequisite: ACTU 357. Valuation methods; gains and losses; dynamic control; special topics.

ACTU 457 *Risk Theory* (3 credits)

Prerequisite: ACTU 257. Applications of contingency theory in health insurance, individual and collective risk theory, ruin theory.

NOTE: Students who have received credit for MATH 428 may not take this course for credit.

ACTU 458 *Credibility Theory* (3 credits)

Prerequisite: ACTU 457; STAT 349 previously or concurrently. Credibility approach to inference for heterogeneous data; classical, regression and Bayesian models; illustrations with insurance data.

ACTU 459 *Loss Distributions* (3 credits)

Prerequisite: ACTU 457; STAT 360. Probability model fitting to loss data; estimation and testing under variety of procedures and sampling designs.

ACTU 486 *Actuarial Mathematics Lab III* (2 credits)

This lab will be a workshop designed to prepare students for the Actuarial Models examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 429 may not take this course for credit.

- ACTU 491** *Topics in Actuarial Mathematics* (3 credits)
- ACTU 492** *Reading Course in Actuarial Mathematics* (3 credits)
- ACTU 493** *Honours Project in Actuarial Mathematics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematical and Computational Finance

MACF 401 *Mathematical and Computational Finance I* (3 credits)

Prerequisite: FINA 385; MATH 265; STAT 349 previously or concurrently. This course is a rigorous introduction to the theory of mathematical and computational finance. Multi-period binomial model; state prices; change of measure; stopping times; European and American derivative securities; interest-rate models; interest-rate derivatives; hedging; convergence to the Black-Scholes model.

MACF 402 *Mathematical and Computational Finance II* (3 credits)

Prerequisite: MACF 401; MATH 473; STAT 461 previously or concurrently. This course is a continuation of MACF 401 and focuses on modelling and computational techniques beyond the binomial model. Simulation; Monte-Carlo methods in finance; option valuation; hedging; heat equation; finite difference techniques; stability and convergence; exotic derivatives; risk management; calibration and parameter estimation.

MACF 491 *Topics in Mathematical and Computational Finance* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

MACF 492 *Reading Course in Mathematical and Computational Finance* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematics and Statistics

MAST 214 *Calculus and Linear Algebra* (6 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB. Functions; maxima and minima. Velocity and acceleration. Iterative solution of equations, parametric equation of curves. Integrals; change of variables, integration by parts, double integrals, numerical integration. Conic sections. Matrices, determinants, eigen-values, eigenvectors, system of equations. Series and their convergence. Introduction to vector space and complex numbers. Word problems.

NOTE: This course can be counted as an elective towards a 90-credit degree program, but must be taken before any other post-Cegep Mathematics course except for MAST 217, which may be taken concurrently. It must be taken, upon entry, by newly admitted students in the MATH/STAT Major who have less than 70% average in Cegep Mathematics courses.

MAST 217 *Introduction to Mathematical Thinking* (3 credits)

Prerequisite: MATH 203 or Cegep Mathematics 103 or 201-NYA; MATH 204 or Cegep Mathematics 105 or 201-NYC or equivalent. This course aims to foster analytical thinking through a problem-solving approach. Topics include construction of proofs, number systems, ordinality and cardinality, role of examples and counter examples, role of generalizations and specializations; role of symbols, notations and definitions; styles of mathematical discourse.

NOTE: Students who have received credit for MASZ 217 or MATH 216 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 217, COMP 232 and COMP 238.

NOTE: Students with more than 12 credits in post-Cegep Mathematics (excluding MAST 214) may not take this course for credit.

MAST 218 *Multivariable Calculus I* (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent. Vector geometry; lines and planes; curves in \mathbb{R}^n ; vector functions; vector differential calculus; extrema and Lagrange multipliers. Introduction to multiple integrals and coordinate transformations. Problem solving with MAPLE.

NOTE: Students who have received credit for MATH 262 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 218; MATH 264.

MAST 219 *Multivariable Calculus II* (3 credits)

Prerequisite: MAST 218 or equivalent. Vector integral calculus; line and surface integrals; Green's, Stokes' and Gauss' theorems; coordinate transformations and Jacobians. Power series, applications. Problem solving with MAPLE.

NOTE: Students who have received credit for MATH 263 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 219; MATH 265.

MAST 221 *Applied Probability* (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent; MAST 218 or equivalent previously or concurrently. Counting rules, discrete probability distributions; random sampling; conditional probability; means and variances, normal and other continuous sampling distributions. Applications. Use of MINITAB and/or SYSTAT.

NOTE: Students who have received credit for MATH 242, STAT 249, COMP 233, ECON 221 or ENGR 371 may not take this course for credit.

NOTE: Students who have received credit for MAST 221 may take STAT 249 for credit only with prior permission of the Department.

NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Please see §200.7 and consult the Mathematics and Statistics undergraduate program advisor.

MAST 223 Introduction to Stochastic Methods of Operations Research (3 credits)

Prerequisite: MAST 221 or equivalent; MAST 219 or equivalent previously or concurrently. Markov chains; queuing theory; inventory theory; Markov decision processes; applications to reliability.

NOTE: Students who have received credit for MATH 337 or STAT 349 may not take this course for credit.

NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Please see §200.7 and consult the Mathematics and Statistics undergraduate program advisor.

MAST 224 Introduction to Optimization (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent. Introduction to the theory of optimization; linear programming; the simplex method; duality and transportation problem. Introduction to graphs and networks; applications. Use of computing softwares.

NOTE: Students who have received credit for MATH 231 or 361 may not take this course for credit.

MAST 232 Mathematics with Computer Algebra (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent. An introduction to the use of a high-level mathematical programming language (MAPLE or MATHEMATICA) as a practical aid in doing mathematics. Most classes are given in an interactive way in the computer laboratory. The emphasis is on applications, not on general programming techniques or abstract structures. The aim is to arrive at a sufficient working familiarity with the computer algebra language to permit its regular use in subsequent studies and applications. The commands and online resources are introduced through a review of arithmetic, complex numbers, algebra, Euclidean geometry, trigonometry, coordinate systems and graphing, elementary functions and transformations, series, derivatives, integrals, vectors and matrices. There may be additional topics from domains such as number theory, differential equations, integral transforms, probability and statistics.

NOTE: Students who have received credit for MAST 332 or COMP 367 or 467, or for this topic under a MAST 397 number, may not take this course for credit.

MAST 234 Linear Algebra and Applications I (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC or equivalent. System of linear equations, matrix operations, echelon forms and LU-factorization; \mathbb{R}^n : subspaces, linear dependence, basis, dimension, matrix transformations; eigenvalues and eigenvectors in \mathbb{R}^n and applications (e.g. Markov chains, dynamical systems). The software MAPLE is extensively used.

NOTE: Students who have received credit for MATH 251, 282 or ECON 325 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 234; MATH 251.

MAST 235 Linear Algebra and Applications II (3 credits)

Prerequisite: MAST 234 or equivalent. \mathbb{R}^n : Orthogonality, projections, Gram-Schmidt method and QR-factorization; applications to least square methods (data fitting, inconsistent systems). Symmetric matrices, principal axes theorem and applications. Special topics (e.g. coding theory, differential equations, error analysis). The software MAPLE will be extensively used.

NOTE: Students who have received credit for MATH 252 or 283 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 235; MATH 252.

MAST 330 Differential Equations (3 credits)

Prerequisite: MAST 219, 234 or equivalent. First order differential equations; second order differential equations; Laplace transform methods; mathematical models and numerical methods.

NOTE: Students who have received credit for MATH 271 may not take this course for credit.

MAST 331 Mathematical Modelling (3 credits)

Prerequisite: MAST 221, 224 previously or concurrently, 234 or equivalent. Introduction to mathematical modelling; predator-prey models in biology, game theory, decision analysis, stability theory; modelling electric circuits.

MAST 332 Techniques in Symbolic Computation (3 credits)

Prerequisite: MAST 217 or COMP 238 or equivalent; COMP 248 or equivalent; MAST 232 or permission of the Department. This course is an application-oriented introduction to symbolic computation, as it applies to algebra, number theory and combinatorics covering the following topics: capabilities of symbolic systems (e.g. MAPLE), modular methods, arithmetic mod p , arithmetic mod m , matrices mod p , Chinese remainder theorem, polynomial factorization mod p . Applications to coding theory and cryptography. Combinatorial algorithms.

NOTE: Students who have received credit for MATH 232 or COMP 367 or 467 may not take this course for credit.

MAST 333 Applied Statistics (3 credits)

Prerequisite: MAST 221 or equivalent. Graphical and numerical descriptive methods; Estimation and hypothesis testing; linear regression and correlation; one way ANOVA; contingency and goodness of fit tests. Use of statistical software, e.g. MINITAB or SYSTAT.

NOTE: Students who have received credit for MATH 243, STAT 360, BIOL 322, COMM 215, COMP 233, ECON 221 or GEOG 362 may not take this course for credit.

NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Please see §200.7 and consult the Mathematics and Statistics undergraduate program advisor.

MAST 334 Numerical Analysis (3 credits)

Prerequisite: MAST 219 or equivalent; MAST 232 or equivalent; MAST 235 previously or concurrently. Introduction to computing softwares; numerical solution of non-linear equations; interpolations and approximations; quadrature and numerical integration.

NOTE: Students who have received credit for MATH 311 or 354 may not take this course for credit.

MAST 335 Investment Mathematics (3 credits)

Prerequisite: MAST 218 or equivalent. Simple and compound interest; annuities; amortization and sinking funds; mortgage schemes; bonds and related securities; capital cost and depletion; spread-sheet implementation.

NOTE: Students who have received credit for MATH 326 may not take this course for credit.

NOTE: Only three credits will be awarded from MAST 335; ACTU 256.

MAST 397 Topics in Mathematics and Statistics (3 credits)**MAST 398 Reading Course in Mathematics and Statistics** (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Mathematics**MATH 200 Fundamental Concepts of Algebra** (3 credits)

This course is designed to give students the background necessary for MATH 201. Some previous exposure to algebra is assumed. Sets, algebraic techniques, inequalities, graphs of equations. Lectures and tutorials.

NOTE: Students who have received credit or exemption for a course at the level of MATH 201 or above may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 201 Elementary Functions (3 credits)

Sets, inequalities, graphs of functions, and relations. Trigonometric, exponential, and logarithmic functions. Lectures and tutorials.

NOTE: Students who have received credit or exemption for MATH 203 or equivalent, or for a course having MATH 203 or equivalent in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 202 College Algebra (3 credits)

Prerequisite: MATH 201 or equivalent. Progressions, combinations, permutations, binomial theorem, mathematical induction, inequalities, polynomials, cartesian and polar forms of complex numbers, conics. Lectures and tutorials.

NOTE: Students who have received credit or an exemption for a course at the level of ACTU 256 or above; MAST 218 or above; MATH 251 or above; STAT 249 or above; or for a course having any of these courses in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 203 Differential and Integral Calculus I (3 credits)

Prerequisite: MATH 201 or equivalent. Functional notation. Differentiation of polynomials. The power, product, quotient, and chain rules. Differentiation of elementary functions. Implicit differentiation. Higher derivatives. Maxima and minima. Applications: tangents to plane curves, graphing, related rates. Approximations using the differential. Antiderivatives, definite integrals, area. Lectures and laboratory.

NOTE: Students who have received credit or an exemption for a course at the level of ACTU 256 or above; MAST 218 or above; MATH 251 or above; STAT 249 or above; or for a course having any of these courses in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 204 Vectors and Matrices (3 credits)

Prerequisite: MATH 201 or equivalent. Algebra and geometry of vectors, dot and cross products, lines and planes. System of equations, operations on matrices, rank, inverse, quadratic form, and rotation of axes. Lectures and tutorials.

NOTE: Students who have received credit or an exemption for a course at the level of ACTU 256 or above; MAST 218 or above; MATH 251 or above; STAT 249 or above; or for a course having any of these courses in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 205 Differential and Integral Calculus II (3 credits)

Prerequisite: MATH 203. Techniques of integration: substitutions, integration by parts, partial fractions. Improper integrals. Physical applications of the definite integral. Infinite series: tests for convergence. Power series, Taylor's theorem. Lectures and laboratory.

NOTE: Students who have received credit or an exemption for a course at the level of ACTU 256 or above; MAST 218 or above;

MATH 251 or above; STAT 249 or above; or for a course having any of these courses in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 206 Algebra and Functions (3 credits)

Coordinate systems. Radicals and distance formula. Polynomials, factoring, and graphing. Relations and functions. Linear and quadratic functions, equations, and systems. Exponents, exponential and logarithmic functions and equations. Lectures and tutorials.

NOTE: Students who have received credit or exemption for a course at the level of MATH 201 or above may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 208 Fundamental Mathematics I (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for John Molson School of Business students*. Matrices, Gaussian elimination, input-output analysis, progressions, compound interest, annuities, permutations and combinations, probability, binomial theorem, exponential and logarithmic functions, inequalities, linear programming. Lectures and tutorials.

*NOTE: See §14.2.2 (Mature Entry) and 61.20 (Extended Credit).

NOTE: Students who have received credit or an exemption for a course at the level of ACTU 256 or above; MAST 218 or above; MATH 251 or above; STAT 249 or above; or for a course having any of these courses in its sequence of prerequisites, may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 209 Fundamental Mathematics II (3 credits)

Prerequisite: MATH 206 or equivalent. This course is a prerequisite course for John Molson School of Business students*. Limits; differentiation of rational, exponential, and logarithmic functions; theory of maxima and minima; integration. Lectures and tutorials.

*NOTE: See §14.2.2 (Mature Entry) and 61.20 (Extended Credit).

NOTE: Students who have received credit or exemption for MATH 203 or equivalent may not take this course for credit.

NOTE: Students in programs leading to the BSc degree or the BA programs in Mathematics and Statistics may not take this course for credit to be applied to their program of concentration.

MATH 212 The Fascinating World of Numbers (3 credits)

This course deals with a blend of fascinating mathematical themes in various contexts: historical, cultural, and practical. It is intended for non-mathematics students. One of the aims of the course is to demonstrate the presence of mathematics and mathematical ideas in many aspects of modern life. At a deeper level, it is also intended to explain what mathematics is all about and why some easily stated assertions, such as Fermat's last theorem, are so difficult to prove. Students who complete the course successfully should have enough understanding and knowledge of fundamental ideas and techniques of mathematics to appreciate its power, its beauty, and its relevance in so many different fields such as architecture, art, commerce, engineering, music, and all of the sciences.

NOTE: Students who have received credit for this topic under a MATH 298 or MATZ 298 number may not take this course for credit.

NOTE: Students enrolled in a Mathematics and Statistics program and students who have taken mathematics beyond the pre-calculus level may not take this course for credit.

MATH 215 Great Ideas in Mathematics (3 credits)

Mathematics is used to unravel the secrets of nature. This course introduces students to the world of mathematical ideas and mathematical thinking. Without being overly technical, that is, without requiring any formal background from the student other than high school mathematics, the course delves into some of the great ideas of mathematics. The topics discussed range from the geometric results of the Ancient Greeks to the notion of infinity to more modern developments.

NOTE: This course is designed as a suitable elective for students following an undergraduate program. It has no formal prerequisites and will not qualify students to enrol for any other Mathematics course, and cannot be used to satisfy a Mathematics requirement in any BSc or BA program.

NOTE: Students who have received credit for INTE 215 or MATZ 215 may not take this course for credit.

MATH 220 Mathematical Methods in Chemistry (3 credits)

Prerequisite: Cegep Mathematics 203 or 201-NYB or MATH 205. Partial derivatives. First-order differential equations (first- and second-order chemical reactions). Hermite, Laguerre, and Legendre equations. Solutions by power series. Eigenfunctions and eigenvalues, Sturm-Liouville theory.

MATH 251 Linear Algebra I (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent. Matrices and linear equations; vector spaces; bases, dimension and rank; linear mappings and algebra of linear operators; matrix representation of linear operators; determinants; eigenvalues and eigenvectors; diagonalization.

NOTE: Students who have received credit for MAST 234, MATH 282 or ECON 325 may not take this course for credit.

NOTE: Only three credits will be awarded from MATH 251; MAST 234.

MATH 252 Linear Algebra II (3 credits)

Prerequisite: MATH 251 or equivalent. Characteristic and minimum polynomials; invariant subspaces, invariant direct sums; nilpotent operators, Jordan canonical form; cyclic subspaces; rational canonical form; bilinear and quadratic forms; inner product; orthogonality; adjoint operators and orthogonal operators.

NOTE: Students who have received credit for MATH 235 or MATH 283 may not take this course for credit.

NOTE: Only three credits will be awarded from MATH 252; MATH 235.

MATH 264 Advanced Calculus I (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent. Introduction to limits and continuity in \mathbb{R}^n . Multivariate calculus: the derivative as a linear approximation; matrix representation of derivatives; tangent spaces; gradients, extrema, including Lagrange multipliers, Taylor's formula and the classification of critical points.

NOTE: Students who have received credit for MATH 262 or 344 may not take this course for credit.

NOTE: Only three credits will be awarded from MATH 264; MATH 218.

MATH 265 Advanced Calculus II (3 credits)

Prerequisite: MATH 264 or equivalent. Implicit functions and the implicit function theorem. Multiple integrals and change of variables. Curves, surfaces and vector calculus.

NOTE: Students who have received credit for MATH 263 or 345 may not take this course for credit.

NOTE: Only three credits will be awarded from MATH 265; MATH 219.

MATH 339 Combinatorics (3 credits)

Prerequisite: 18 credits in post-Cegep Mathematics. General principles of counting, permutations, combinations, identities, partitions, generating functions, Fibonacci numbers, Stirling numbers, Catalan numbers, principle of inclusion-exclusion. Graphs, subgraphs, isomorphism, Euler graphs, Hamilton paths and cycles, planar graphs, Kuratowski's Theorem, trees, colouring, 5-colour theorem, matching, Hall's theorem.

NOTE: Students who have received credit for COMP 339 may not take this course for credit.

MATH 352 Linear Algebra III (3 credits)

Prerequisite: MATH 252. Matrices, linear transformations, determinants, metric concepts, inner-product spaces, dual spaces, spectral theorem, bilinear and quadratic forms, canonical forms for linear transformation, matrix functions, selected topics.

NOTE: Students who have received credit for MATH 381 may not take this course for credit.

MATH 354 Numerical Analysis (3 credits)

Prerequisite: MATH 265 or equivalent; MATH 252 or equivalent, previously or concurrently. Error analysis in numerical algorithms; solution of non-linear equations; fixed point iterations, rate of convergence. Interpolations and approximations, Legendre polynomials. Numerical integration and quadrature.

NOTE: Students who have received credit for MATH 311 or MATH 334 may not take this course for credit.

MATH 361 Operations Research I (3 credits)

Prerequisite: MATH 251 or equivalent. Introduction to the theory of optimization; linear programming, simplex method; revised simplex method; transport and assignment problems; integer programming; introduction to graphs and networks.

NOTE: Students who have received credit for MATH 231 or MATH 224 may not take this course for credit.

MATH 364 Analysis I (3 credits)

Prerequisite: 12 credits in post-Cegep Mathematics or permission of the Department. Mathematical rigour: proofs and counter-examples; quantifiers; number systems; Cardinality, decimal representation, density of the rationals, least upper bound. Sequences and series; review of functions, limits and continuity.

NOTE: Students who have received credit for MATH 244 or 362 may not take this course for credit.

MATH 365 Analysis II (3 credits)

Prerequisite: MATH 364 or equivalent. Connectedness and compactness in the reals. Intermediate value theorem; extreme values for continuous functions. Differential and integral calculus; fundamental theorem of calculus; power series.

NOTE: Students who have received credit for MATH 245 or 363 may not take this course for credit.

MATH 366 Complex Analysis I (3 credits)

Prerequisite: MATH 265 or equivalent. Algebra and geometry of complex numbers, linear transformations, analytic functions, Laurent's series, calculus of residues, special functions.

MATH 369 Abstract Algebra I (3 credits)

Prerequisite: 12 credits in post-Cegep Mathematics or permission of the Department. Introduction to the ring of integers and the integers modulo N . Groups: definitions and examples; sub-groups, quotients and homomorphisms (including Lagrange's theorem, Cayley's theorem and the isomorphism theorems). Introduction to the Cauchy and Sylow theorems and applications.

NOTE: Students who have received credit for MATH 393 may not take this course for credit.

MATH 370 Ordinary Differential Equations (3 credits)

Prerequisite: MATH 265, 251 or equivalent. Separable equations, exact equations, integrating factors, force fields, first order linear equations, input-output concept, second order equations, Sturm-Liouville problems, applications, series solutions, reduction

of order, variation of parameters, n th-order linear equations with constant coefficients, Laplace transforms, block diagrams, and signal-flow graphs.

NOTE: Students who have received credit for MATH 271 or MAST 330 may not take this course for credit.

MATH 380 *Differential Geometry* (3 credits)

Prerequisite: MATH 252, 365, 370. Calculus on Euclidian spaces, tangent vectors, directional derivatives, differential forms, mappings, curves, frame fields, Serret-Frenet formulae, covariant derivatives; calculus on a surface, tangent spaces, differential forms on a surface, mappings between surfaces, integration of forms, Stokes' theorem.

MATH 387 *Mathematics Lab III* (2 credits)

This lab will demonstrate the use of MAPLE software for Calculus, Linear Algebra, and Statistics.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

MATH 392 *Elementary Number Theory* (3 credits)

Prerequisite: 18 credits in post-Cegep Mathematics. Number systems, division and factorization, number-theoretic functions, congruences, algebraic congruences and primitive roots, quadratic residues, diophantine equations.

MATH 397 *History of Mathematics* (3 credits)

Prerequisite: MATH 252 or permission of the Department; MATH 365. Early mathematics, Greek mathematics, European mathematics in the Middle Ages, the origin and development of analytic geometry and calculus, mathematics as free creation, the generality of mathematics in the 20th century.

MATH 433 *Calculus of Variations* (3 credits)

Prerequisite: MATH 265, 365, 370 or equivalent. Nature of problems, weak variations, the first variation, Euler's equation. The second variation, Jacobi's equation, Legendre's test, conjugate points. Relative maxima and minima, iso-perimetrical problems. Integrals with variable end points. Applications to problems in pure and applied mathematics; the principle of least action. Strong variations, the Weierstrass E-function.

MATH 464 *Real Analysis* (3 credits)

Prerequisite: MATH 265, 365 or equivalent. Metric spaces; function spaces; compactness, completeness, fixed-point theorems, Ascoli-Arzelà theorem, Weierstrass approximation theorem.

MATH 466 *Complex Analysis II* (3 credits)

Prerequisite: MATH 265, 365, 366 or equivalent. Cauchy's theorem, singularities, maximum modulus principle, uniqueness theorem, normal families, Riemann mapping theorem.

MATH 467 *Measure Theory* (3 credits)

Prerequisite: MATH 265, 365 and 464 previously or concurrently, or equivalent. Lebesgue measure and integration on the real line, convergence theorems, absolute continuity, completeness of $L^2[0,1]$.

MATH 470 *Abstract Algebra II* (3 credits)

Prerequisite: MATH 369 or equivalent. Group action and proof of the Sylow theorems. Introduction to rings, ideals, euclidean domains, principal ideal domains and unique factorization domains; polynomial rings.

NOTE: Students who have received credit for MATH 394 may not take this course for credit.

MATH 471 *Abstract Algebra III* (3 credits)

Prerequisite: MATH 470 or equivalent. Rings and modules; structure theorem of modules over principal ideal domains. Noetherian rings and modules (including Hilbert basis theorem for rings and modules). Hilbert's Nullstellensatz.

NOTE: Students who have received credit for MATH 491 may not take this course for credit.

MATH 472 *Abstract Algebra IV* (3 credits)

Prerequisite: MATH 470 or equivalent. Elements of field and Galois theory, including straight-edge-and-compass construction and unsolvability of equations of fifth degree by radicals.

NOTE: Students who have received credit for MATH 492 may not take this course for credit.

MATH 473 *Partial Differential Equations* (3 credits)

Prerequisite: MATH 370 or equivalent. Canonical forms for second order linear equations with constant coefficients, classification of linear second order equations, method of separation of variables, first order PDE's, method of characteristics. Non-linear first order equations, complete integrals, Cauchy conditions, Cauchy-Kowalewski theorem, Fourier and Laplace transforms, Green's functions, integral representations, introduction to non-linear PDE's.

NOTE: Students who have received credit for MATH 371 may not take this course for credit.

MATH 474 *Linear and Non-Linear Dynamical Systems* (3 credits)

Prerequisite: MATH 265, 365 or equivalent, or permission of the Department. Systems of linear differential equations; fundamental matrices; non-homogeneous linear systems; non-linear systems; solutions and trajectories; the phase plane; stability concepts; Liapounov's second method; periodic solutions and limit cycles; introduction to boundary-value problems and Sturm-Liouville theory.

NOTE: Students who have received credit for MATH 373 may not take this course for credit.

MATH 475 Discrete Dynamical Systems, Chaos and Fractals (3 credits)

Prerequisite: MATH 265, 365 or equivalent, or permission of the Department. Introduction to discrete dynamical modelling; periodic points; bifurcation; period three points; symbolic dynamics; chaos; transitivity; conjugacy; complex behaviour; introduction to fractals; computer simulations.

NOTE: Students who have received credit for MATH 379 may not take this course for credit.

MATH 478 Non-Linear Programming (3 credits)

Prerequisite: MATH 361 or permission of the Department. Classical methods of optimization, Lagrange multipliers, Kuhn-Tucker conditions; line search methods, quadratic programming, gradient methods, introduction to dynamic programming.

NOTE: Students who have received credit for MATH 436 may not take this course for credit.

MATH 479 Convex and Non-Linear Analysis (3 credits)

Prerequisite: MATH 365 or permission of the Department. Support and separation of convex sets, extreme point characterizations, convex and dual cones, Farkas' theorem; minimax theorem of Game Theory, Legendre-Fenchel conjugate, infimal convolution, subgradient calculus; Lagrangians, necessary and sufficient conditions for optimality in constrained minimization; the dual problem.

MATH 494 Topics in Pure and Applied Mathematics (3 credits)**MATH 495 Reading Course in Pure and Applied Mathematics** (3 credits)**MATH 496 Honours Project in Pure and Applied Mathematics** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Statistics**STAT 249 Probability I** (3 credits)

Prerequisite: Cegep Mathematics 105 or 201-NYC, 203 or 201-NYB or equivalent; MATH 264 or equivalent previously or concurrently. Axiomatic approach to probability; combinatorial probability; discrete and continuous distributions; expectation; conditional expectation; random sampling and sampling distributions.

NOTE: Students who have received credit for MATH 242, COMP 233, ECON 221 or ENGR 371 may not take this course for credit.

NOTE: Students who have received credit for MAST 221 may take STAT 249 for credit only with prior permission of the Department.

NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Please see §200.7 and consult the Mathematics and Statistics undergraduate program advisor.

STAT 250 Statistics (3 credits)

Prerequisite: STAT 249 or equivalent; MATH 265 or equivalent previously or concurrently. Point and interval estimation; hypothesis testing; Neyman Pearson Lemma and likelihood ratio tests; introduction to correlation and regression.

NOTE: Students who have received credit for MATH 243, COMP 233, ECON 221 or ENGR 371 may not take this course for credit.

NOTE: Students enrolled in a Mathematics and Statistics program who take probability/statistics courses in other departments may not receive credit for this course. Please see §200.7 and consult the Mathematics and Statistics undergraduate program advisor.

STAT 287 Statistics Lab I (1 credit)

This lab is associated with STAT 249 and 250 and features problem-solving sessions for the probability examination of the Society of Actuaries and the Casualty Actuarial Society.

NOTE: Students who have received credit for MATH 329 may not take this course for credit.

STAT 342 Industrial Statistics (3 credits)

Prerequisite: STAT 250 or MAST 333. Concepts of statistical quality control; \bar{X} , R, P, and C control charts, acceptance sampling, sampling inspection, continuous sampling plans.

NOTE: Students who have received credit for MATH 342 may not take this course for credit.

STAT 343 Sample Survey Theory and Applications (3 credits)

Prerequisite: STAT 250 or MAST 333. Basic sampling designs and estimators; simple random sampling, stratified, cluster and systematic sampling. Sampling with unequal probabilities; ratio and regression methods of estimation.

NOTE: Students who have received credit for MATH 343 may not take this course for credit.

STAT 347 Introduction to Non-Parametric Statistics (3 credits)

Prerequisite: STAT 250 or MAST 333. Theory of rank tests, sign test, Mann-Whitney and Wilcoxon one-sample and two-sample tests, Kruskal-Wallis test, goodness of fit tests, Kolmogorov-Smirnov test, Pearson chi-square test, rank correlation and Kendall's tau.

NOTE: Students who have received credit for MATH 347 may not take this course for credit.

STAT 349 Probability II (3 credits)

Prerequisite: STAT 249 or equivalent. Markov decision process and applications. Poisson process, queuing theory, inventory theory; applications.

NOTE: Students who have received credit for MAST 223 and/or MATH 337 and/or MATH 351 may not take this course for credit.

STAT 360 Linear Models (3 credits)

Prerequisite: STAT 250 or equivalent. Least-squares estimators and their properties. General linear model with full rank. Analysis of residuals; adequacy of model, lack of fit test, weighted least squares; stepwise regression, Durbin-Watson statistic; one way and two way analysis of variance.

NOTE: Students who have received credit for MATH 348, ECON 222 or PSYC 316 may not take this course for credit.

STAT 388 Statistics Lab II (2 credits)

This lab will use various softwares such as SYSTAT, SAS, SPLUS, MINITAB for data analysis.

NOTE: Students who have received credit for MATH 232 may not take this course for credit.

STAT 449 Advanced Probability (3 credits)

Prerequisite: STAT 250, 349. Central limit theorems and law of large numbers, convergence of random variables, characteristic function, moment generating function, probability generating functions, random walk and reflection principle.

NOTE: Students who have received credit for MATH 451 may not take this course for credit.

STAT 450 Mathematical Statistics (3 credits)

Prerequisite: STAT 250, 349 previously or concurrently, or permission of the Department. Derivation of standard sampling distributions; distribution of order-statistics; estimation, properties of estimators; Rao-Cramer inequality, Rao-Blackwell theorem, maximum likelihood and method of moments estimation, Neyman-Pearson theory, likelihood ratio tests and their properties.

NOTE: Students who have received credit for MATH 454 may not take this course for credit.

STAT 452 Introduction to Stochastic Processes (3 credits)

Prerequisite: STAT 449. Continuous stochastic processes. Poisson processes, continuous time Markov process, queuing models, birth and death processes, renewal theory.

NOTE: Students who have received credit for MATH 353 may not take this course for credit.

STAT 460 Time Series and Forecasting (3 credits)

Prerequisite: STAT 360. Time series, forecasting by trend and irregular components (using multiple regression analysis and exponential smoothing); forecasting seasonal time series, additive and multiplicative decomposition methods, Box-Jenkins methodology, moving average, autoregressive and mixed models.

NOTE: Students who have received credit for MATH 443 may not take this course for credit.

STAT 461 Operations Research II (3 credits)

Prerequisite: STAT 349. Simulation and Monte-Carlo techniques; selected topics in operations research.

NOTE: Students who have received credit for MATH 437 may not take this course for credit.

STAT 465 Multivariate Statistics (3 credits)

Prerequisite: MATH 252; STAT 360 or equivalent. Multivariate normal distribution; estimation and testing of hypothesis about mean vector; multiple and partial correlation; MANOVA; principal components analysis.

STAT 468 Design of Experiments (3 credits)

Prerequisite: STAT 360. Construction and analysis of standard designs, including balanced designs; block designs; orthogonal designs; response surface designs.

STAT 480 Statistical Data Analysis (3 credits)

Prerequisite: STAT 360 or permission of the Department. The analysis of real life data sets using computer packages. Topics involve techniques from generalized linear models; model selection; log-linear models for categorical data analysis; logistic regression; censored survival models.

NOTE: Students who have received credit for MATH 445 or DESC 445 may not take this course for credit.

STAT 497 Topics in Statistics (3 credits)**STAT 498 Reading Course in Statistics** (3 credits)**STAT 499 Honours Project in Statistics** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.220

PHILOSOPHY

Faculty

Chair

DAVID MORRIS, PhD *Tor.*, Professor

Professors

MURRAY CLARKE, PhD *W.Ont.*

CHRISTOPHER B. GRAY, PhD *C.U.A.*

SHEILA MASON, PhD *Purdue*

JUSTIN SMITH, PhD *Col.*

Associate Professors

ANDREA FALCON, PhD *Padua*

MATTHIAS FRITSCH, PhD *Villanova*

PABLO GILABERT, PhD *New Sch.*

GREGORY LAVERS, PhD *W.Ont.*

Assistant Professor

MATTHEW BARKER, PhD *Wis.(Madison)*

Affiliate Professors

BELA EGYED, PhD *McG.*

GEORGE GALE, PhD *Calif.(Davis)*

KAI NIELSEN, PhD *Duke*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex PR, Room: 203

514-848-2424, ext. 2500

Department Objectives

The Department of Philosophy offers a broad range of studies in philosophy. This includes courses in the history of philosophy spanning three millennia and courses covering a diverse spectrum of philosophical topics and approaches. Many of the courses are designed for undergraduates pursuing studies in other disciplines in the humanities, social sciences, and sciences. The aim is to contribute to the development of critical, informed, and open minds.

Programs

The major and minor programs give students an understanding of the aims, methods, and content of a range of major philosophical periods and traditions. The honours program prepares students for graduate study in philosophy.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in Philosophy

Stage I

12 PHIL 214³, 232³, 260³, 261³

3 Chosen from PHIL 263³, 265³

Stage II

9 PHIL 330³, 360³, 361³

3 Chosen from PHIL 364³, 365³

3 Chosen from PHIL 362³, 374³, 377³

9 PHIL elective or cognate credits at the 300 or 400 level*

Stage III

- 3 Chosen from PHIL 414³, 416³, 420³, 425³, 463³, 465³, 489³
- 3 Chosen from PHIL 430³, 440³, 471³
- 3 Chosen from PHIL 480³, 481³, 483³, 485³, 486³, 487³
- 12 PHIL elective or cognate credits at the 400 level*

**PHIL elective or cognate credits to be chosen in consultation with the Department.*

NOTE: Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental undergraduate advisor normally following the completion of 30 credits.

36 BA Major in Philosophy

Stage I

- 3 Chosen from PHIL 210³, 214³
- 9 PHIL 232³, 260³, 261³
- 3 Chosen from PHIL 263³, 265³

Stage II

- 6 PHIL 360³, 361³
- 3 Chosen from PHIL 362³, 374³, 377³

Stage III

- 6 PHIL elective credits at any level
- 6 PHIL elective credits at the 400 level*

**PHIL elective or cognate credits to be chosen in consultation with the Department.*

24 Minor in Philosophy

- 6 Chosen from PHIL 232³, 263³, 265³
- 6 PHIL elective credits at the 200 level or higher
- 12 PHIL elective credits from the 300 level or higher

Courses

PHIL 201 *Problems of Philosophy* (3 credits)

In this course, students are introduced to philosophical problems such as: What is the nature of reality? How does one know what is real, and how is it distinct from misleading appearances or illusion? What is knowledge? Does knowledge require certainty? How is knowledge distinct from belief? Are people free? That is to say, do they choose their actions or are their actions determined by causes beyond their control? If people are not free, then how can they be held responsible for their actions? Can God's existence be proven? How is the mind related to the body, if at all? What is it to be a morally good person?

NOTE: Students who have received credit for PHIZ 201 may not take this course for credit.

PHIL 210 *Critical Thinking* (3 credits)

This course is an introduction to argumentation and reasoning. It focuses on the kinds of arguments one is likely to encounter in academic work, in the media, and in philosophical, social, and political debate. The course aims to improve students' ability to advance arguments persuasively and their ability to respond critically to the arguments of others. Students will find the skills they gain in this course useful in virtually every area of study.

NOTE: Students who have received credit for PHIZ 210 or for this topic under a PHIZ 298 number may not take this course for credit.

PHIL 214 *Deductive Logic* (3 credits)

This course presents the modern symbolic systems of sentential and predicate logic. Students transcribe English sentences into a logical form, analyze the concepts of logical truth, consistency, and validity, as well as learn to construct derivations in each system.

NOTE: This course may not be taken for credit by students who have taken PHIL 212.

PHIL 216 *Introduction to the Philosophy of Language* (3 credits)

This course provides an introduction to the main problems in the philosophy of language, concerned with the analysis of the concepts of meaning, reference, truth, necessity.

PHIL 218 *Inductive Logic* (3 credits)

Prerequisite: PHIL 214, or permission of the Department. This course provides an introduction to probabilistic and non-probabilistic approaches to inductive logic. Topics covered may include: Hume's problem of induction, the new riddle of induction, causality, and the interpretation of the probability calculus.

PHIL 220 *Introduction to the Philosophy of Science* (3 credits)

This course provides an introduction to the main problems in the philosophy of science. These include the structure of scientific theories, various models of scientific method and explanation, and the existence of unobservables.

NOTE: Students who have received credit for INTE 250 or PHIL 228 may not take this course for credit.

PHIL 226 *Mind and Action* (3 credits)

Drawing from contemporary work in philosophy and psychology, students have the opportunity to consider philosophical questions about the nature of the mind. For example: What is the relation between mind and brain? Can there be disembodied minds? What is conscious experience and how is it to be studied? Is artificial intelligence possible? The other major theme of this course is the possible motives for human action. For example: Can people act without intentions? Can they have intentions without free will? What influence do environmental, genetic, and societal factors have on their actions?

PHIL 232 *Introduction to Ethics* (3 credits)

Philosophical discussions of ethics have both practical significance (What should one do?) and theoretical interest (What does it mean to say "That's the right thing to do"?). In this course, students are introduced to some representative approaches to ethical thought and action. General questions about the nature of ethical reasoning are also considered. For example: Are there objective ethical truths or are ethical judgments merely relative to social norms? An effort is made to incorporate those ethical issues which are of specific importance to contemporary society.

NOTE: Students who have received credit for PHIL 232 may not take this course for credit.

PHIL 233 *Applied Ethics* (3 credits)

This course focuses on ethical theory and its application to contemporary issues. The course covers central ethical theories such as virtue ethics (Aristotle), deontology (Kant), and utilitarianism (Mill). It applies these theories to contemporary moral issues such as humans' relation to the environment and nonhuman animals, abortion, consumerism, the use of recreational drugs, the rationing of health-care resources, and national and international distributive justice.

NOTE: Students who have received credit for PHIL 233 or for this topic under a PHIL 298 or PHIL 298 number may not take this course for credit.

PHIL 234 *Business Ethics* (3 credits)

The purpose of this course is to reflect on issues associated with corporate responsibility with a view to identifying and responding to ethical situations, rather than focusing on specific rules of governance.

PHIL 235 *Biomedical Ethics* (3 credits)

This course is primarily concerned with contemporary biomedical debates, many of which are of current social and political significance: euthanasia and physician-assisted suicide, patients' rights, animal experimentation, organ donation and transplantation, palliative care, abortion, genetic engineering, and new reproductive technologies.

NOTE: Students who have received credit for PHIL 235 may not take this course for credit.

PHIL 236 *Environmental Ethics* (3 credits)

This course examines recent developments in ethical theories as they are applied to questions of environmental practices. Topics discussed may include the moral significance of nonhuman nature, duties to respond to climate change, economics and sustainable environmental protection, and environmental justice.

NOTE: Students who have received credit for this topic under a PHIL 298 or 398 number may not take this course for credit.

PHIL 241 *Philosophy of Human Rights* (3 credits)

This course investigates basic philosophical questions regarding human rights, such as their status between morality and law, their scope and the problem of relativism, the concept of human dignity, their relation to democracy, whether national or cosmopolitan, and the debate over the justifiability and feasibility of socio-economic rights as human rights.

NOTE: Students who have received credit for this topic under a PHIL 298 number may not take this course for credit.

PHIL 255 *Philosophy of Leisure* (3 credits)

Prerequisite: 30 university credits. This course is designed primarily for students in Therapeutic Recreation and Leisure Sciences. It consists of an examination of various leisure practices from the point of view of philosophical ideals of human fulfillment that include ethical thinking and reflection on some of the effects of global economic practices of consumption.

PHIL 260 *Presocratics and Plato* (3 credits)

This course is a study of ancient Greek philosophy from its beginnings to Plato.

PHIL 261 *Aristotle and Hellenistic Philosophy* (3 credits)

Prerequisite: PHIL 260, or permission of the Department. This course is an introduction to Aristotle and the main lines of thought in Hellenistic philosophy, including Stoicism, Epicureanism and Scepticism.

PHIL 263 *Introduction to Epistemology* (3 credits)

An introduction to the basic concepts and problems in epistemology, including belief, knowledge, scepticism, perception, and intentionality.

PHIL 265 *Introduction to Metaphysics* (3 credits)

This course is an introduction to metaphysics and the attempt to understand a mind-independent reality. This involves distinguishing those aspects of reality that are dependent on the mind from those aspects that are independent of the mind. For example, are colours mind-independent properties? Are there universal values and if so, are they mind-independent? Is there a God, and if so, what must that God be like?

PHIL 266 *Introduction to Philosophy of Religion* (3 credits)

This course explores a long philosophical tradition concerned with various issues associated with the idea of God, such as the various proofs for God's existence, and questions such as: How does the existence of evil affect one's views about God and the nature of God? What is the status of miracles? What are the varieties of religious experience, what is the nature of religious faith? How is one to understand religious language?

PHIL 275 *From Modern to Postmodern: Philosophical Thought and Cultural Critique* (3 credits)

This course focuses on key developments in modern and postmodern philosophy and their cultural influences. The course provides an introduction to philosophers (such as Kant, Nietzsche, and Foucault) and philosophical movements (such as empiricism, existentialism, and post-structuralism) of the modern era. It also introduces students to the tremendous influence that philosophical theory has had on the arts, on social and political movements, and on virtually every field of study in the humanities and social sciences.

NOTE: Students who have received credit for this topic under a PHIZ 298 number may not take this course for credit.

PHIL 285 *Non-Western Philosophy* (3 credits)

This course introduces the student to the philosophical traditions of non-Western cultures. The particular focus differs from year to year.

PHIL 298 *Introductory Topics in Philosophy* (3 credits)

PHIL 299 *Introductory Topics in Philosophy* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 314 *Intermediate Logic: Metatheory* (3 credits)

Prerequisite: PHIL 214, or permission of the Department. This course presents the basic concepts of metalogic, including mathematical induction, soundness and completeness, and decidability.

PHIL 315 *Intermediate Logic: Themes and Problems* (3 credits)

Prerequisite: PHIL 214, or permission of the Department. Topics covered may include modal logic, probabilistic logic, many-valued logic, relevance logic, and historical themes in logic.

PHIL 318 *Philosophy of Biology* (3 credits)

Prerequisite: Three credits in Philosophy or permission of the Department. This course examines a variety of philosophical issues in biology. Topics covered may include: fitness, function, units of selection, the nature of species, reductionism, biological explanation of human behaviour and the ethical and epistemological consequences of evolutionary theory.

PHIL 324 *Philosophy of Social Science* (3 credits)

Prerequisite: Three credits in Philosophy or 12 credits in social science, or permission of the Department. This course offers a philosophical examination of the structure and methodology of the social sciences.

PHIL 325 *Minds, Brains and Machines* (3 credits)

Prerequisite: PHIL 226, or permission of the Department. An examination of the computer model of the mind by consideration of the classical computationalist account and its problems, together with some attention to the connectionist alternative.

PHIL 327 *Artificial Intelligence* (3 credits)

Prerequisite: Three credits in Philosophy or Computer Science. The purpose of this course is to explore the analogy between mental activity and the operation of computers or "electronic brains," with a view to answering the question: Can machines think? Topics may include the theory of the Turing machine, the Turing test of intelligence, the functionalist theory of the mind, the nature of creativity, and the implications of Gödel's incompleteness theorem.

PHIL 328 *Intermediate Philosophy of Science* (3 credits)

Prerequisite: Three credits in Philosophy or permission of the Department. This course provides an in-depth study of the nature of justification in science, theories of scientific explanation, the rationality of theory change, and debates concerning realism and antirealism.

PHIL 329 *Conceptual Revolutions in Science* (3 credits)

Prerequisite: Three credits in Philosophy or permission of the Department. This course examines the philosophical implications of major scientific revolutions. Examples of such revolutions may include the Newtonian revolution and Einstein's theories of relativity.

PHIL 330 *Contemporary Ethical Theory* (3 credits)

Prerequisite: PHIL 232 or 233 or 234 or 235 or 236 or 241, or permission of the Department. This course provides an examination of contemporary ethical theories such as deontology, utilitarianism, virtue theory, feminist ethics, and narrative ethics.

NOTE: Students who have received credit for PHIZ 330 or for this topic under a PHIL 398 or PHIZ 398 number may not take this course for credit.

PHIL 333 *Philosophical Ideas in Literature* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. This course presents a comparative approach to philosophical ideas in literature, which may involve authors from different historical time frames, different world views, or different perspectives of a single author.

PHIL 339 *Aesthetics* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. A survey of aesthetic theories in philosophy, with particular attention to major developments in the modern and contemporary periods.

PHIL 342 *Political Philosophy* (3 credits)

Prerequisite: Three credits in Philosophy or Political Science, or permission of the Department. This course provides analyses of important political and philosophical concepts such as globalization, nationalism, power, multiculturalism, tolerance, liberty, equality, community, economic justice, and democracy.

PHIL 343 *Philosophy of Law: General Jurisprudence* (3 credits)

This course provides a philosophical study of natural law theory, legal positivism, and legal realism. The associated issues of legal moralism, legal justice, legal obligation and its limits, and legal reasoning are addressed and applied to cases.

PHIL 344 *The Philosophy of Liberalism* (3 credits)

In this course, the student examines several perspectives from which the problem of the relation between law and morality may be treated. Conflicting concepts of law, morality, and the relation of the individual to society are discussed. The problem of authority is examined in relation to issues of civil liberties, civil rights, and the social basis of legal conflicts.

PHIL 345 *Legal Philosophy: Legal Rights and Duties* (3 credits)

This course offers a philosophical study of the nature, sources, and functions of rights and duties. Attention is given to the particular rights associated with contract and property, and their abuse, to duties arising by law alone, to excuses and justifications for failure to fulfill duties, and to enforcement, punishment, and compromise.

PHIL 352 *Philosophy of History* (3 credits)

Prerequisite: Three credits in History or Philosophy, or permission of the Department. An analysis of the nature of historical knowledge and explanation is followed by a study of classical and contemporary attempts to elucidate the meaning of history. Authors may include Augustine, Vico, Kant, Hegel, Marx, Spengler, Popper, Toynbee, Arendt.

PHIL 356 *Philosophy of Education* (3 credits)

This course examines philosophical principles underlying educational theories and problems arising from the practical implementation of those theories.

PHIL 360 *Rationalism* (3 credits)

Prerequisite: 12 credits in Philosophy including PHIL 260 and 261, or permission of the Department. This course is a study of central aspects of the work of Descartes, Spinoza, and Leibniz, covering metaphysical, ethical and epistemological issues.

PHIL 361 *Empiricism* (3 credits)

Prerequisite: 12 credits in Philosophy including PHIL 260 and 261, or permission of the Department. This course is a study of central aspects of the work of Locke, Berkeley, and Hume, covering metaphysical, ethical, and epistemological issues.

PHIL 362 *Medieval Philosophy* (3 credits)

Prerequisite: PHIL 260 and 261, or permission of the Department. This course is an introduction to the main lines of thought in medieval philosophy. Thinkers examined may include Augustine, Boethius, Abelard, Anselm, Avicenna, Averroes, Thomas Aquinas, Duns Scotus, William of Occam.

NOTE: Students who have received credit for PHIL 363 may not take this course for credit.

PHIL 364 *Intermediate Epistemology* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. This course presents an intermediate study of major contemporary issues in the theory of knowledge, such as scepticism, nonempirical knowledge, contextualism, virtue epistemology, experimental epistemology, and debates between internalists and externalists concerning justification and knowledge.

PHIL 365 *Intermediate Metaphysics* (3 credits)

Prerequisite: Three credits in Philosophy, or permission of the Department. This course presents an intermediate study of major contemporary issues in metaphysics, such as realism vs. anti-realism concerning the external world; mental causation, personhood and theories of human nature; universals, essences and natural kinds.

PHIL 371 *Philosophy of Feminism* (3 credits)

Prerequisite: PHIL 232 or 263, or permission of the Department. This course provides an introduction to some of the central issues in contemporary feminist philosophy. The key arguments in feminist epistemology, feminist ethics, and sex and gender studies are discussed from a variety of perspectives.

PHIL 374 *Kant and 19th-Century Philosophy* (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. This course examines Kant and some of the main currents of post-Kantian philosophy, possibly including Hegel and post-Hegelians, the romantic reaction, positivism, and pragmatism.

NOTE: Students who have received credit for PHIL 474 may not take this course for credit.

PHIL 377 *20th-Century Continental Philosophy* (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. This course examines 20th-century French and German philosophy. Philosophers examined may include Husserl, Heidegger, Merleau-Ponty, Foucault, Derrida, and Habermas.

PHIL 378 *American Pragmatism* (3 credits)

Prerequisite: Six credits in Philosophy, or permission of the Department. This course provides an analysis of some classical American pragmatists, such as Peirce, Dewey, James and C.I. Lewis, together with exponents of contemporary neopragmatism, such as Putnam, Rorty, and Quine.

PHIL 385 *Marxism* (3 credits)

This course provides a critical analysis of the ideas of Marx and their modern development.

PHIL 387 *Existentialism* (3 credits)

This course acquaints the student with the fundamentals of the existentialist movement as a philosophical perspective. Philosophers considered may include Kierkegaard, Nietzsche, Heidegger, Sartre, Merleau-Ponty, Jaspers, Marcel, and Berdyaev.

PHIL 398 *Intermediate Special Topics in Philosophy* (3 credits)

PHIL 399 *Intermediate Special Topics in Philosophy* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHIL 414 *Advanced Topics in Logic* (3 credits)

Prerequisite: PHIL 314, or permission of the Department. This course presents the fundamentals of an advanced topic in logic.

PHIL 416 *Philosophy of Language* (3 credits)

Prerequisite: 12 credits in Philosophy or permission of the Department. This course is an advanced study of a central problem in recent philosophy of language.

PHIL 420 *Advanced Philosophy of Science* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course explores advanced topics in the philosophy of science, such as theory change and justification, realism and anti-realism, or reductionism; or specific issues in philosophy of physics or biology, such as evolution and development.

PHIL 425 *Philosophy of Mind: Cognitive Science* (3 credits)

Prerequisite: PHIL 226 or 325 or 327, or permission of the Department. This interdisciplinary course combines the philosophical study of mind with current research in psychology, neuroscience, linguistics, and computer science.

PHIL 430 *Advanced Studies in Ethics* (3 credits)

Prerequisite: PHIL 232 or 330, or permission of the Department. This course offers a study of one or more of the following ethical theories: deontology, utilitarianism, virtue theory, feminist ethics, care ethics, narrative ethics, contractualism, and discourse ethics, with a focus on ethical reasoning and motivation.

PHIL 440 *Advanced Political Philosophy* (3 credits)

Prerequisite: PHIL 241 or 342, or permission of the Department. This course uses selected historical or contemporary writings in political philosophy to treat topics such as those of power, freedom, equality, distributive justice, law, and the boundaries of the political. Specific topics for this course are stated in the Undergraduate Class Schedule.

PHIL 463 *Honours Seminar in Epistemology* (3 credits)

Prerequisite: PHIL 263 or 265 or 364 or 365, and 12 credits in Philosophy, or permission of the Department. This course presents an intensive study of major contemporary issues in the theory of knowledge.

PHIL 465 *Honours Seminar in Metaphysics* (3 credits)

Prerequisite: PHIL 263 or 265 or 364 or 365, and 12 credits in Philosophy, or permission of the Department. This course presents an intensive study of major contemporary issues in metaphysics.

PHIL 471 *Advanced Topics in Feminist Theory* (3 credits)

Prerequisite: PHIL 371, or permission of the Department. An examination of recent issues in one of feminist ethics, epistemology or metaphysics. Subject will vary from year to year.

PHIL 480 *Plato* (3 credits)

Prerequisite: 12 credits in Philosophy including PHIL 260 and 261, or permission of the Department. Selected themes in the major dialogues of Plato are analyzed in depth.

PHIL 481 *Aristotle* (3 credits)

Prerequisite: 12 credits in Philosophy including PHIL 260 and 261, or permission of the Department. Selected passages from the major works of Aristotle are analyzed in depth.

PHIL 483 *Advanced Topics in the History of Philosophy* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course presents an intensive study of selected topics in the history of philosophy.

PHIL 485 *Kant* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course is an intensive study of Kant's *Critique of Pure Reason* and related works.

PHIL 486 *Hegel* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course is an analysis of selected themes from Hegel's works.

PHIL 487 *Early Analytic Philosophy* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such early analytic philosophers as Moore, Russell, Ayer, Carnap, the early Wittgenstein, and Frege.

PHIL 488 *Contemporary Analytic Philosophy* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course investigates selected philosophical problems as they arise in the writings of such analytic philosophers as the later Wittgenstein, Quine, Ryle, Austin, Sellars, Davidson, Putnam, and others.

PHIL 489 *Phenomenology* (3 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. This course examines the phenomenological approach to philosophical problems, theoretical or practical. It may include discussion of the seminal works of Husserl, Heidegger, and Merleau-Ponty.

PHIL 490 *Advanced Continental Philosophy* (3 credits)

Prerequisite: 12 credits in Philosophy including PHIL 374 or 377, or permission of the Department. This course investigates selected philosophical problems as they arise in the works of such philosophers as Nietzsche, Husserl, Heidegger, Sartre, Merleau-Ponty, Levinas, Gadamer, Adorno, Derrida, Deleuze, Habermas, Irigaray, Foucault, and others. Specific topics for this course are stated in the Undergraduate Class Schedule.

PHIL 495 *Honours Essay* (3 credits)

Prerequisite: Enrolment in Honours Philosophy; 30 credits in Philosophy. With permission of the Department, an honours student may arrange a tutorial program with a faculty member culminating in a research project not exceeding 40 pages.

**PHIL 496 *Tutorial in Philosophy*
(3 credits)**

Prerequisite: Permission of the Department. This is an opportunity to carry out a personal project under the supervision of a faculty member. An intensive reading program is undertaken in the student's area of special interest. Tutorials may be arranged with any faculty member, and the student must make these arrangements and obtain *written* permission in advance of registration. *NOTE: Students who have received credit for PHIL 497 may take this tutorial for credit provided the subject matter is different.*

PHIL 497 *Tutorial in Philosophy* (3 credits)

Prerequisite: Permission of the Department. See PHIL 496 for description.

NOTE: Students who have received credit for PHIL 496 may take this tutorial for credit provided the subject matter is different.

PHIL 498 *Advanced Topics in Philosophy* (3 credits)

PHIL 499 *Advanced Topics in Philosophy* (6 credits)

Prerequisite: 12 credits in Philosophy, or permission of the Department. Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.230

PHYSICS

Faculty

Chair

TRUONG VO-VAN, PhD *Tor.*, Professor

Professors

BARRY FRANK, PhD *Br.Col.*

MARIANA FRANK, PhD *Tor.*

CALVIN S. KALMAN, PhD *Roch.*, *Provost's Distinction*

SUSHIL K. MISRA, PhD *St.Louis*

PANAGIOTIS VASILOPOULOS, PhD *Montr.*

Associate Professors

LASZLO KALMAN, PhD *Szeged*

RAMESH C. SHARMA, PhD *Tor.*

JOSEPH SHIN, MSc *C'nell.*

VALTER ZAZUBOVITS, PhD *Tartu*

Assistant Professors

PABLO BIANUCCI, PhD *Texas (Austin)*

ALEXANDRE CHAMPAGNE, PhD *C'nell.*

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Richard J. Renaud Science Complex, Room: SP 365.02

514-848-2424, ext. 3270

Department Objectives

Breakthroughs in physics have revolutionized thinking about the fundamentals of matter, motion, and energy. Physics is the study of these fundamentals. The Physics Department is committed to preparing students for careers or advanced study in the theoretical, applied, and biological aspects of physics. Students in the co-op program gain valuable job experience and discover the career opportunities open to them in addition to regular course work.

Programs

Students are required to complete the appropriate entrance profile for entry into the program (see §31.002 — Programs and Admission Requirements — Profiles).

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

42 Core Program

6 MAST 218³, 219³

33 PHYS 232³, 236³, 245³, 252³, 253³, 334³, 335³, 354³, 367³, 377³, 435³

3 PHYS 291¹, 293¹, 297¹

69 BSc Honours in Physics

42 Core Program

6 PHYS 496⁶

Concentration in Physics

15 PHYS 345³, 355³, 358³, 468³, 478³

3 Chosen from PHYS 436³, 458³

3 Chosen from PHYS 290², 370³, 394¹, 440³, 498³

- Concentration in Biophysics
 12 BIOL 266³; PHYS 260³, 360³, 461³
 9 Chosen from BIOL 261³, 340³, 367³, 371³; CHEM 235³, 271³, 431³; PHYS 345³, 358³, 370³, 440³, 462³, 463³

66 BSc Specialization in Physics

- Option A: Physics
 42 Core Program
 18 PHYS 345³, 355³, 358³, 468³, 478³, 497³
 3 Chosen from PHYS 436³, 458³
 3 Chosen from PHYS 290², 370³, 394¹, 440³, 498³

66 BSc Specialization in Physics

- Option B: Biophysics
 42 Core Program
 15 BIOL 266³; CHEM 271³; PHYS 260³, 360³, 497³
 9 Chosen from BIOL 261³, 340³, 367³, 371³; CHEM 235³, 431³; PHYS 345³, 358³, 370³, 440³, 461³, 462³, 463³, 468³

45 BSc Major in Physics

- 42 Core Program
 3 Chosen from any PHYS course in consultation with an advisor

PHYSICS CO-OPERATIVE PROGRAM

Director
 SUSHIL K. MISRA, Professor

The Physics co-operative program is offered to students who are enrolled in the BSc specialization programs in Physics. Students interested in applying for the Physics co-op should refer to §24 where a full description of the admission requirements is provided. Academic content is very similar to that of the regular programs, with some specific recommendations for courses to improve the students' job skills. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada.

Students are supervised personally and must meet the requirements specified by the Faculty of Arts and Science and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Physics co-op committee, which includes the student's advisors.

Please refer to §24 for the schedule of study and work terms and the full description of admission requirements.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PHYS 200 From Particles to Galaxies (3 credits)

This course covers all the major topics in physics including Galileo's role in science, the Newtonian synthesis, optics radiation and absorption of heat, relativity, quantum mechanics, astrophysics and cosmology at a level that a non-science student can grasp. Students in this course are not required to do any mathematical problem solving.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

NOTE: Students who have received credit for this topic under a PHYS 298 or PHYZ 298 number may not take this course for credit.

PHYS 204 Mechanics (3 credits)

Prerequisite: MATH 203 or equivalent, previously or concurrently. Kinematics, Newton's laws of motion. Statics, dynamics. Conservation of momentum and energy. Rotational motion. Periodic motion. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 224 for laboratory associated with this course.

PHYS 205 Electricity and Magnetism (3 credits)

Prerequisite: MATH 203; PHYS 204 or equivalent. Electrical charge and Coulomb's law. Electrical field and potential. Capacity, steady state, and transient currents. Electromagnetic induction and alternating currents. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 225 for laboratory associated with this course.

PHYS 206 Waves and Modern Physics (3 credits)

Prerequisite: PHYS 204 or equivalent. Simple harmonic motion. Wave propagation. Superposition. Stationary waves. Doppler effect. Interference. Diffraction. Photoelectric effect. Compton effect. Bohr's atom. Radioactivity, fission, fusion. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration. See PHYS 226 for laboratory associated with this course.

PHYS 210 Discoveries in Physics (6 credits)

A non-mathematical course in physics specifically designed for students who have had little or no experience in physics. This course traces the fundamental ideas from which modern physics has emerged, and attempts to develop insights into the understanding of natural phenomena. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit.

PHYS 224 Introductory Experimental Mechanics (1 credit)

Prerequisite: PHYS 204 previously or concurrently, or permission of the Department. This laboratory course covers fundamental experiments in classical mechanics. Experiments include resolution of forces, centrifugal force and conservation of energy, pendulums. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 225 Introductory Experimental Electricity (1 credit)

Prerequisite: PHYS 205 previously or concurrently, or permission of the Department. This laboratory course covers fundamental experiments in electricity. Experiments include Kirchhoff's law, resistors in series and parallel, oscilloscope, induction, alternating current. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 226 Introductory Experimental Waves and Modern Physics (1 credit)

Prerequisite: PHYS 206 previously or concurrently, or permission of the Department. This laboratory course covers the fundamental experiments in waves and modern physics. Experiments include spectrometer measurements. Newton's rings and measurements involving radioactivity. Laboratory only, 10 experiments.

NOTE: Students in programs leading to the BSc degree may not take this course for credit to be applied to their program of concentration.

PHYS 232 Methods of Theoretical Physics I (3 credits)

Prerequisite: MAST 218 previously or concurrently. First-order differential equations, linear and separable equations, integrating factors, applications. Second-order linear differential equations. Fundamental solutions, linear independence, Wronskian. Nonhomogeneous equations, general solution, method of undetermined coefficients, variation of parameters, applications. Power-series solutions of differential equations, examples. Systems of first-order linear equations. Review of linear algebra, diagonalization of matrices, eigenvalues. Lectures only.

PHYS 235 Object-Oriented Programming and Applications (3 credits)

Prerequisite: MATH 203, 204. Introduction to problem solving with computers; programming. Basic elements of an object-oriented language; basic data types, objects, expressions, simple programs. Control structures; library functions, one- and two-dimensional arrays. Introduction to mathematics software (Maple and/or Mathematica) and to programming languages (C/C++ and/or Fortran 77). The material is illustrated with simple examples from physics.

NOTE: Students may replace this course with COMP 248.

NOTE: Students who have received credit for COMP 248 or PHYS 233 may not take this course for credit.

PHYS 236 Numerical Analysis in Physics (3 credits)

Prerequisite: PHYS 235 or COMP 248. Basic numerical analysis, symbolic and numerical computation and programming with a computer language and/or mathematics software program, curve fitting. Numerical solutions to linear and nonlinear ordinary and partial differential equations, difference equations. Gaussian elimination, LU decomposition, least-square approximation, linear systems of equations. Numerical differentiation and integration.

NOTE: Students may replace this course with MAST 334.

NOTE: Students who have received credit for MAST 334 may not take this course for credit.

PHYS 245 Classical Mechanics (3 credits)

Prerequisite: MATH 204, 205 or equivalent. Statics of rigid bodies, work and potential functions, motion in uniform field. Particle motion in an accelerated frame, rotation coordinate systems, motion in a resisting medium, small oscillations, damped (harmonic) motion, motion under central forces, mechanics of a rigid body, dynamics of systems of particles, motion of rigid bodies in three dimensions, elements of Lagrangian mechanics. Lectures only.

NOTE: See PHYS 291 for laboratory associated with this course.

NOTE: Students who have received credit for PHYS 243 or 244 may not take this course for credit.

PHYS 252 Optics (3 credits)

Prerequisite: PHYS 206. Wave equation, phasors, EM waves, linear, circular and elliptical polarization, polariscope, Malus' law, dichroism, polaroid, polarizing Prism, quarter and half wave plates, wave superposition, interference, Young's double slit experiment, Michelson interferometer, reflectance and transmittance of thin films, interferometers, dispersion, elements of Fourier analysis, diffraction, single slit diffraction, double slit, Fraunhofer and Fresnel limits, diffraction grating, Fresnel diffraction, instruments, introduction to lasers.

NOTE: Students who have received credit for PHYS 352 may not take this course for credit.

PHYS 253 Electricity and Magnetism I (3 credits)

Prerequisite: PHYS 205 or equivalent; MAST 218 or equivalent, previously or concurrently. Electrostatics, Gauss' law, electric potential, curl and divergence of fields, capacitance, RC circuits, Laplace's equation, Legendre equation, method of images, multipole expansion, dielectrics, polarization, dipole moments, electric displacement.

NOTE: See PHYS 293 for laboratory associated with this course.

PHYS 260 Introductory Biophysics (3 credits)

Cell physiology; macromolecules and molecular devices; transmission of genetic information; random walks, friction and diffusion; Reynolds number; entropy, temperature and free energy; entropic forces; chemical forces; self-assembly; membranes; active transport; nerve impulses. Overview of experimental techniques: X-ray crystallography; atomic force, electron and optical microscopies; patch-clamp techniques.

NOTE: Students who have received credit for this topic under a PHYS 298 number may not take this course for credit.

PHYS 270 Introduction to Energy and Environment (3 credits)

This course is designed for students who have little or no background in physics. Topics covered include relationship of physics to environment and energy. Concept and definition of work and energy. Interaction of people and inanimate objects with the environment. Heat and chemical energy. Electromagnetic and nuclear energy. Conservation of energy — how it affects everyday life. Sources of energy used on Earth. Solar energy. Production of wind power, water power, solar cells from sun's energy, biological uses, biopower. Lectures only.

NOTE: Students in programs leading to the BSc degree may not take this course for credit.

PHYS 273 Energy and Environment (3 credits)

Prerequisite: PHYS 270, or six credits in Cegep Physics, or equivalent. Nuclear energy stored in the earth. Geothermal energy. Biological energy stored in the earth. Second law of thermodynamics. Entropy. Food energy. Home heating and cooling. Solar heating. Transportation of people, goods, and energy. Recycling materials. Resource conservation and humanity's ability to change — need for a conservation ethic, need for alternate energy sources, need for public knowledge. Lectures only.

PHYS 290 Experimental Electronics (2 credits)

Prerequisite: PHYS 205, 225 or equivalent. A practical laboratory course in electronics. This course explores the usage of electronic measuring instruments and components. Experiments include power supplies, transistor amplifiers, operational amplifiers, oscillators, audio and radio frequency amplifiers.

NOTE: Students who have received credit for PHYS 295 and 296 may not take this course for credit.

PHYS 291 Experimental Mechanics I (1 credit)

Prerequisite: PHYS 245 previously or concurrently. A laboratory course in mechanics. Experiments include pendulum, coefficient of restitution, centrifugal force, rotational inertia, inelastic impact.

PHYS 292 Experimental Mechanics II (1 credit)

Prerequisite: PHYS 291. A laboratory course in mechanics. Experiments include the use of air tracks to study acceleration, collisions, dissipative forces, and periodic motion. Other experiments include viscosity and surface tension of liquids.

PHYS 293 Experimental Electricity and Magnetism I (1 credit)

Prerequisite: PHYS 253 previously or concurrently. A laboratory course in electricity and magnetism. Experiments include motion of electrons in electric and magnetic fields, exponential relaxation, damped oscillations, resonance, non-linearity, negative resistance.

PHYS 294 Experimental Electricity and Magnetism II (1 credit)

Prerequisite: PHYS 293. A laboratory course in electricity and magnetism. Experiments include the transistor, amplification and frequency response, transient response and negative feedback, positive feedback and oscillation, periodic structures.

PHYS 295 Experimental Electronics I (2 credits)

A practical laboratory course in electronics. Experiments include resistors in series and parallel, voltmeter, Ohm's law, Kirchhoff's current and voltage laws, Ohmmeter, capacitor, inductor, transformer, rectifiers, voltage doubler, zener diode, power supplies.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 296 Experimental Electronics II (2 credits)

Prerequisite: PHYS 295. A practical laboratory course in electronics. Experiments include oscilloscope, biasing of bipolar transistors, transistor amplifiers, voltage and current regulators, field-effect transistor, oscillators, operational amplifier circuits, audio amplifier, I-F transformer, limiter, amplitude and frequency modulation.

NOTE: Students who have received credit for PHYS 290 may not take this course for credit.

PHYS 297 Experimental Optics (1 credit)

Prerequisite: PHYS 252 previously or concurrently. An experimental course in optics. Experiments include diffraction, optical instruments, resonance, and various experiments using lasers. Laboratory only, 10 experiments.

NOTE: Students who have received credit for PHYS 392 may not take this course for credit.

PHYS 298 **Selected Topics in Physics** (3 credits)

PHYS 299 **Selected Topics in Physics** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 334 **Thermodynamics** (3 credits)

Prerequisite: PHYS 204 or equivalent; MAST 218, 219 or equivalent. Equation of state, ideal and real gases, thermodynamic surfaces, first law of thermodynamics, isothermal and adiabatic processes, the energy equation, liquefaction of gases, Carnot engine, second law of thermodynamics, entropy, third law, thermodynamic potentials, Clausius-Clapeyron equation, kinetic theory, equipartition of energy, Van der Waals' equation, transport phenomena, probability and thermal distributions. Lectures only.

NOTE: See PHYS 393 for laboratory associated with this course.

PHYS 335 **Methods of Theoretical Physics II** (3 credits)

Prerequisite: PHYS 232 or equivalent; MAST 219 previously or concurrently. Function of a complex variable, Fourier series, applications to a vibrating string, heat conduction, Fourier transform, Laplace transform, application to differential equations, delta functions, eigenvalue problems. Lectures only.

PHYS 345 **Advanced Classical Mechanics** (3 credits)

Prerequisite: PHYS 232 or equivalent; PHYS 245 or equivalent; MAST 219. Survey of Newtonian mechanics; D'Alembert's principle and Lagrangian formulation; variational formulation and Hamilton's principle. Hamiltonian formulation, canonical transformations, Poisson brackets (connection to quantum mechanics); central force motion; planetary motion; scattering in a central field, dynamics of rigid bodies; Euler's equations; Hamilton-Jacobi theory, applications. Introduction to non-linear mechanics.

NOTE: Students who have received credit for PHYS 346 may not take this course for credit.

PHYS 354 **Electricity and Magnetism II** (3 credits)

Prerequisite: PHYS 253 or equivalent; MAST 219 or equivalent, previously or concurrently. Biot-Savart Law, Ampere's law, divergence and curl of \mathbf{B} , magnetic vector potential, magnetization, ferromagnetism, electromagnetic induction, motional EMF, inductance, transformer, ac-circuits, Maxwell's equations, the wave equation, polarization, reflection and transmission of em waves, rectangular wave guide, half-wave antenna. Lectures only.

NOTE: Students who have received credit for PHYS 254 may not take this course for credit.

PHYS 355 **Electronics** (3 credits)

Prerequisite: PHYS 358 recommended. Basic circuit analysis, network theorems, maximum power transfer, diode characteristics and circuits, power supply designs, transistor characteristics, incremental equivalent circuits, input and output impedance calculations, emitter follower and Darlington amplifiers, power amplifiers, dc stabilization and negative feedback, operational amplifiers, phase detection, frequency multiplier and special circuits. Lectures only.

NOTE: See PHYS 290 for laboratory associated with this course.

PHYS 358 **Solid State Physics** (3 credits)

Prerequisite: PHYS 377 concurrently. Drude and Sommerfeld theory of metals, crystal lattices, reciprocal lattice, electron levels in periodic potentials, tight-binding method, semiclassical model of electron dynamics and of conduction in metals, relaxation-time approximation, Boltzmann equation, homogeneous semiconductors, lattice vibrations, Fermi surface, cohesive energy.

PHYS 360 **Chemical Aspects of Biophysics** (3 credits)

Prerequisite: PHYS 253, 334. Stabilizing protein structures; bonding and nonbonding interactions; energy profiles; Ramachandran plot; stabilization through protonation-deprotonation. Interaction of macromolecules with solvents. Thermodynamics of protein folding. Ligand binding, Marcus-theory of biological electron transfer. Examples of modern biophysical techniques: electronic spectroscopies (absorption, fluorescence), X-ray absorption spectroscopy, NMR and EPR spectroscopy, IR and Raman spectroscopy, circular dichroism, differential scanning calorimetry.

NOTE: Students enrolled in a BSc Honours or Specialization in Biochemistry may not take this course for credit.

PHYS 367 **Modern Physics and Relativity** (3 credits)

Prerequisite: PHYS 205, 206 or equivalent; PHYS 354 recommended. *Relativity*: Lorentz transformations (revision), space-time and four-tensors, Minkowski map of space-time, four-velocity and four-acceleration, four-momentum, equivalence of mass and energy, angular momentum, three- and four-force, formal structure of Maxwell's theory, transformation of \mathbf{E} and \mathbf{B} , electromagnetic energy tensor. *Atomic Physics*: Introduction to the theory of blackbody radiation, the photoelectric effect, the Compton effect, De Broglie's postulate, Bohr's postulates, Bohr's and Sommerfeld's model, Schrödinger's quantum mechanics, Schrödinger's equation, Bohr's interpretation of the wavefunctions, expectation values, time-independence, eigenfunctions and eigenvalues, energy quantization; solutions of the time-independent Schrödinger's equation free particle, and simple one-dimensional potentials.

NOTE: See PHYS 394 for laboratory associated with this course.

PHYS 370 **Nonlinear Dynamics/Chaos/Fractals** (3 credits)

Prerequisite: PHYS 232 or equivalent. One-dimensional flows and maps, bifurcations, two-dimensional flows and maps, phase plane and limit cycles. Lorenz equations, strange attractors, chaos and nonlinearity, deterministic chaos, period doubling, experimental manifestations. Fractals, fractal dimension, examples of chaos and of fractals. Applications in physics, biology, chemistry, and engineering.

NOTE: Students who have received credit for this topic under a PHYS 498 number may not take this course for credit.

PHYS 377 Quantum Mechanics I (3 credits)

Prerequisite: PHYS 335, 345, 367. Schrödinger equation, probabilistic interpretation, normalization, expectation values, the uncertainty principle, stationary states, the free particle, infinite square well, the finite square well, the harmonic oscillator, the delta potential, the scattering matrix, vector spaces, postulates of quantum mechanics, operators and eigenvectors, compatible observables, the uncertainty relations, time-evolution of states, Ehrenfest's equations, the variational principle, nondegenerate time-independent perturbation theory, degenerate perturbation theory, spherical coordinates and the hydrogen atom, angular momentum, spin, addition of angular momenta.

NOTE: Students who have received credit for PHYS 477 may not take this course for credit.

PHYS 384 Introduction to Astronomy (3 credits)

Prerequisite: PHYS 205 or equivalent; MATH 205 or equivalent. The celestial sphere. The solar system. Celestial mechanics. Basic stellar characteristics. The galaxy — structure and content. Extragalactic objects. Lectures only.

PHYS 385 Astrophysics (3 credits)

Prerequisite: PHYS 384. The stars, stellar atmospheres, motion, interiors, and populations. Variable stars. Nebulae. Radio, X-ray, and infrared sources. The galaxy — population and dynamics. The extragalactic universe. Lectures only.

PHYS 390 Experimental Digital Electronics (3 credits)

Prerequisite: PHYS 296 or equivalent. Breadboarding digital circuits; gating a signal; truth tables; decade counter; decoders, demultiplexers, multiplexers and sequencers; light-emitting diodes and LED displays; tristate and open collector outputs; flip-flops, monostable multivibrators; semiconductor memories; registers, binary counters, arithmetic logic units. Laboratory only.

NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 391 Introduction to Experimental Microprocessors and Assembly Language Programming (3 credits)

Prerequisite: PHYS 235; COMP 212 or equivalent. Eight-bit microprocessor architecture: opcodes, addressing modes, memory mapped I/O, vectored interrupts, etc. The MS/DOS operating system, word processing, Motorola assembly language: pseudocodes, labels, sub-routines, interrupt service routines, structured programming techniques. Cross assemblers, RS232 serial transmission of ASCII and binary data to remote computers. Laboratory only.

NOTE: Students who have received credit for PHYS 396 may not take this course for credit.

PHYS 392 Experimental Medical Electronics (3 credits)

Prerequisite: PHYS 290 or 296, or equivalent. A laboratory course in the maintenance and use of medical instruments, including ECG monitor, electrocardiograph, cardio-tachometer, blood-pressure recorder, respiration-rate recorder, and clinical thermometer. The component parts of the instruments are studied first, and then the instruments are constructed and tested. Laboratory only.

NOTE: Students who have received credit for PHYS 397 may not take this course for credit.

PHYS 393 Experimental Thermodynamics (1 credit)

Prerequisite: PHYS 334 previously or concurrently. A laboratory course in thermodynamics. Experiments include Clement and Desormes' experiment, vaporization, specific heats, liquid nitrogen boiling. Laboratory only, 10 experiments.

NOTE: Students who have received credit for PHYS 494 may not take this course for credit.

PHYS 394 Experimental Atomic Physics (1 credit)

Prerequisite: PHYS 226 or equivalent, or permission of the Department. An experimental course in atomic physics. Experiments include the Frank-Hertz experiment, the Zeeman effect, mass spectrometer, and some X-ray work. Laboratory only, 10 experiments.

PHYS 398 Selected Topics in Physics (3 credits)**PHYS 399 Selected Topics in Physics** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PHYS 435 Statistical Physics (3 credits)

Prerequisite: PHYS 334, 367. Statistical concepts, probability, Gaussian probability distribution, statistical ensemble, macrostates and microstates, thermodynamic probability, statistical thermodynamics, reversible and irreversible processes, entropy, thermodynamic laws and statistical relations, partition functions, Maxwell's distributions, phase transformation, Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein statistics, quantum statistics in classical limit, black-body radiation, conduction of electrons in metal, interacting particle system, lattice vibrations, virial coefficients, Weiss molecular field approximation, Kinetic theory of gases, Boltzmann equation. Lectures only.

PHYS 436 Methods of Theoretical Physics III (3 credits)

Prerequisite: PHYS 335 or equivalent. Partial differential equations, eigenfunction expansion and finite transforms, Laplace, Poisson, wave and diffusion equations, applications, special functions, boundary value problems, Sturm-Liouville theory, Bessel functions, Legendre and Hermite polynomials, spherical harmonics, Green's function and applications, perturbation theory, variational theory. Lectures only.

PHYS 440 Computational Methods and Simulations in Physics (3 credits)

Prerequisite: PHYS 232, 334, 377. The first part of the course fully develops the UNIX/Fortran/C code for problem solving through direct experience with problems in mechanics, electromagnetism, and quantum mechanics. Applications include finite square well,

simple pendulum, charge distribution, phase space, anharmonic oscillator, vibrating string, etc. The second part of the course introduces the Monte Carlo and molecular dynamics methods, first-principles calculations for materials, electronic properties, electrodynamics and electrical circuit simulations, and biophysics simulations.

PHYS 458 *Advanced Electrodynamics* (3 credits)

Prerequisite: PHYS 354, 436. Electrostatic boundary-value problem and Green's function, Maxwell's equation, energy-momentum tensor, guided waves, dielectric wave guides, fibre optics, radiation static field, multipole radiation, velocity and acceleration field, Larmor's formula, relativistic generalization, radiating systems, linear antenna, aperture in wave guide, Thomson scattering, bremsstrahlung, Abraham-Lorentz equation, Breit-Wigner formula, Green's function for Helmholtz's equation, Noether's theorem. Lectures only.

PHYS 461 *Membrane Biophysics* (3 credits)

Prerequisite: BIOL 266; PHYS 360. Fluid dynamics; composition of natural membranes; selection criteria for artificial membranes; phases and phase transitions of lipids; lipid-protein interactions; transport mechanisms across membranes; facilitated diffusion, Michaelis-Menten equation, ion channels, active transport against a concentration gradient, ATPase; origin of membrane potentials; electrogenic ion pumps; experimental methods to measure membrane potentials (patch clamp, optical, radioactive); resting and action potentials.

PHYS 462 *Bioenergetics* (3 credits)

Prerequisite: PHYS 360, 461. Chemiosmotic energy transduction, ion transport across energy conserving membranes, quantitative bioenergetics: measurement of driving forces. Chemiosmotic proton circuit, respiratory chains, photosynthesis, photosynthetic generators of protonmotive force, coupling between biological electron and proton transfer reactions, ATP synthase, metabolite and ion transport, mitochondria in the cell.

PHYS 463 *Optical Spectroscopy with Biophysics Applications* (3 credits)

Prerequisite: PHYS 377. Beer-Lambert Law, absorption; fluorescence; pump-probe; photon echo, IR and Raman spectroscopies; linear and circular dichroism; single molecule spectroscopy; spectral hole burning and fluorescence line narrowing. Relevant concepts of quantum mechanics (time-dependent and time-independent Schrödinger equation, spatial wavefunctions, transitions between states and time-dependent perturbation theory, lifetimes and uncertainty principle). Atomic and molecular orbitals. Some concepts related to symmetry and group theory. Resonance energy transfer. Optical properties of molecular aggregates.

PHYS 468 *Condensed Matter and Nanophysics* (3 credits)

Prerequisite: PHYS 358; PHYS 377 previously or concurrently. Review of phonon modes and electron band structure. Quantum condensed-matter topics: Hartree-Fock, mesoscopic quantum transport theory (quantum dots, 1D systems, 2D systems), superconductivity, the quantum Hall effects, and weak localization.

NOTE: Students who have received credit for PHYS 467 may not take this course for credit.

PHYS 470 *Nonlinear Waves* (3 credits)

Prerequisite: PHYS 335. Linear stability analysis and limitations, modulated waves and nonlinear dispersion relations. Korteweg-de Vries, sine-Gordon, and nonlinear Schrödinger equations. Hydro-dynamic, transmission-line, mechanical, lattice, and optical solitons. Applications in optical fibres, Josephson junction arrays. Inverse scattering method, conservation laws.

PHYS 478 *Quantum Mechanics II* (3 credits)

Prerequisite: PHYS 377. Particle states, classification of symmetry, parity, numerical solution of Schrödinger's equation, WKB approximation, variational method, alpha decay probability, time-dependent perturbation theory, systems of particles in one dimension, interacting particles, identical particles, Pauli exclusion Principle, Motion in three dimensions, hydrogen atom, angular momentum and spin, Pauli spin matrices, Dirac's relativistic wave equation.

PHYS 480 *Directed Readings in Theoretical Physics* (3 credits)

Prerequisite: Permission of the Department. A course for advanced students in which a special topic, selected in consultation with a faculty member, is studied in depth.

PHYS 488 *Lasers and Fibre-optics* (3 credits)

Prerequisite: PHYS 252, 354. Semiconductor physics, semiconductor sources, detectors, waveguides and fibres, optical communications, assorted topics in electro-optics.

NOTE: Students who have received credit for this topic under a PHYS 498 number may not take this course for credit.

PHYS 491 *Experimental Microprocessor Interfacing* (3 credits)

Prerequisite: PHYS 390; PHYS 391 or equivalent. Address decoding, multiplexing, and demultiplexing with TTL integrated circuits. Address decoding circuits, drivers, and receivers. Parallel, serial and non-TTL I/O. Breadboarding, wire-wrapping, and soldering techniques. The use of oscilloscopes, logic probes, and computers for circuit trouble-shooting. Drawing schematic diagrams. Timing diagrams. Data sheets. Laboratory only.

PHYS 494 *Methods of Experimental Physics* (3 credits)

Prerequisite: PHYS 290, 293, 394 or equivalent, or permission of the Department. A supervised research project which may include experiments in nuclear physics, laser and fibre-optics, solid state physics, ultrasonics, or thermal physics. A technical report is required.

PHYS 495 *Experimental Nuclear Physics* (1 credit)

Prerequisite: PHYS 394. A laboratory course in nuclear physics. Experiments include gamma- and beta-ray spectroscopy, nuclear magnetic resonance, half-life determination, nuclear activities. Laboratory only, 10 experiments.

PHYS 496 *Honours Research Project* (6 credits)

Prerequisite: Enrolment in Honours in Physics; permission of the Department. A research project for honours students that is carried out on a special topic in physics, biophysics, or applied physics under the supervision of a faculty member.

PHYS 497 *Specialization Research Project* (3 credits)

Prerequisite: Enrolment in the Specialization in Physics; permission of the Department. This is an independent studies course for advanced specialization students in which a special topic in physics, biophysics, or applied physics is studied under the supervision of a faculty member. The student is required to write a report and give a brief presentation.

PHYS 498 *Advanced Topics in Physics* (3 credits)

PHYS 499 *Advanced Topics in Physics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.240

POLITICAL SCIENCE

Faculty

Chair

CSABA NIKOLENYI, PhD Br.Col., Professor

Associate Chair

JAMES KELLY, PhD McG., Associate Professor

Distinguished Professors Emeriti

HENRY HABIB, PhD McG.

JAMES MOORE, MA Tor.

Professors

HAROLD R. CHORNEY, PhD Tor.

MARCEL DANIS, LLL Montr.

HORST HUTTER, PhD Stan.

BROOKE JEFFREY, PhD Car.

GUY LACHAPELLE, PhD Northwestern

MABEN POIRIER, PhD McG.

NORRIN M. RIPSAN, PhD Penn.

DANIEL SALÉE, PhD Montr.

PETER STOETT, PhD Qu.

Associate Professors

ANTOINE BILODEAU, PhD Tor.

ELIZABETH A. BLOODGOOD, PhD Prin.

GRAHAM DODDS, PhD Penn.

AXEL HUELSEMEYER, PhD Calg.

MEBS KANJI, PhD Calg.

EDWARD KING, PhD Calif.(Berkeley)

MICHAEL LIPSON, PhD Wis.(Madison)

KIMBERLEY MANNING, PhD Wash.

PATRIK MARIER, PhD Pitt.

JEAN-FRANÇOIS MAYER, PhD Penn.State

STEPHANIE PATERSON, PhD Car.

AMY POTEETE, PhD Duke

FRANCESCA SCALA, PhD Car.

LEANDER SCHNEIDER, PhD Col.

JULIAN SCHOFIELD, PhD Col.

TRAVIS SMITH, PhD Harv.

MARLENE SOKOLON, PhD N.Ill.

Assistant Professors

CEREN BELGE, PhD Wash.

TINA HILGERS, PhD York (Can.)

Lecturer

RICHARD BISAILLON, PhD C'dia.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: H 1225-22

514-848-2424, ext. 2105

Department Objectives

The Department of Political Science offers a wide range of courses and programs to acquaint students with the living complexity of contemporary government and politics. The curriculum provides the theoretical foundations, analytical skills, and research methods for understanding the construction of government policy as well as the underlying nature and purpose of political processes and institutions. The aim is to prepare well-rounded, concerned citizens for careers in the public service and the private sector, or for graduate or law school.

Programs

The Department of Political Science offers the following programs of study: an honours, a major, and a minor.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

Students must apply to the departmental honours advisor for formal admission to either option of the honours program. Applications are due by May 15 for September admission and by November 15 for January admission. The number of places available in the Political Science Honours program is limited, and admission to the program is highly competitive. Students must have a cumulative GPA of at least 3.5 to be eligible to apply. If admitted, they must maintain an annual GPA of at least 3.5 to graduate with honours. In order to maintain honours status, students must obtain approval for their programs from the honours advisor each year, prior to registration.

The program of courses leading to a Minor in Political Science consists of 24 credits in the Department. The minor is designed to provide an opportunity for students to make a combination with a specialization, a major, or honours in another discipline. A student's minor will be arranged in consultation with the Department of Political Science so that it relates to courses in the major area of study.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Option A

60 BA Honours in Political Science

15 POLI 203³, 204³, 205³, 206³, 207³

6 Chosen from POLI 306³, 345³, 364³, 371³, 373³, 384³

3 Chosen from POLI 393³ or 372^{6*}

33 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of 12 credits at the 400 level

3 POLI 496³ (*Honours Seminar*)

**Students who opt to take POLI 372 are given three credits towards the 33-credit requirement in the Political Theory Group.*

Option B

60 BA Honours (Thesis) in Political Science

15 POLI 203³, 204³, 205³, 206³, 207³

6 Chosen from POLI 306³, 345³, 364³, 371³, 373³, 384³

3 Chosen from POLI 393³ or 372^{6*}

3 POLI 396³ (*Honours Tutorial*)

24 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with a minimum of nine credits at the 400 level

6 POLI 495⁶ (*Honours Thesis*)

3 POLI 496³ (*Honours Seminar*)

**Students who opt to take POLI 372 are given three credits towards the 24-credit requirement in the Political Theory Group.*

42 BA Major in Political Science

15 POLI 203³, 204³, 205³, 206³, 207³

27 Chosen from at least three of the five groups in Political Science at the 300 or 400 level with at least six credits at the 400 level

24 Minor in Political Science

12 POLI 203³, 204³, 205³, 206³

12 Chosen from any of the five groups in Political Science. A minimum of nine credits must be taken at the 300 or 400 level.

24 Minor in Human Rights Studies

6 PHIL 241³; POLI 214³

18 Chosen from ENGL 369³, 380³, 382³, 383³, 387³; FPST 321³; HIST 315³, 359³, 477³; HIST 360³ or SOCI 367³; JOUR 442³; PHIL 232³, 342³, 343³, 345³; POLI 301³, 388³; RELI 310³, 312³; SOCI 380³ or ANTH 380³; THEO 343³

NOTE: For details on the course descriptions in the program listed above, please refer to the individual departmental course listings.

Core Program

- POLI 203** Introduction to Comparative Politics (3 credits)
 - POLI 204** Introduction to Canadian Politics (3 credits)
 - POLI 205** Introduction to International Relations (3 credits)
 - POLI 206** Introduction to Western Political Theory (3 credits)
 - POLI 207** Introduction to Political Science Research (3 credits)
-

Group 1: International Politics

- POLI 213** Contemporary Issues in Global Politics (3 credits)
 - POLI 214** Human Rights: An Overview (3 credits)
 - POLI 215** Global Politics (3 credits)
 - POLI 216** Introduction to the United Nations (3 credits)
 - POLI 301** Social Movements and Protest Politics (3 credits)
 - POLI 302** International Security (3 credits)
 - POLI 304** Theories of Foreign Policy Making (3 credits)
 - POLI 305** International Political Economy (3 credits)
 - POLI 311** International Public Law (3 credits)
 - POLI 312** Special Topics in International Politics (3 credits)
 - POLI 315** International Organizations (3 credits)
 - POLI 318** Introduction to Strategic Studies (3 credits)
 - POLI 329** American Foreign Policy (3 credits)
 - POLI 332** Theories of International Relations (3 credits)
 - POLI 342** Asia and Power Politics (3 credits)
 - POLI 388** Human Rights and International Justice (3 credits)
 - POLI 391** Middle East and Global Conflict (3 credits)
 - POLI 394** Globalization and Sustainable Development (3 credits)
 - POLI 400** Advanced Seminar in International Relations Theory (3 credits)
 - POLI 402** Advanced International Political Economy (3 credits)
 - POLI 403** Global Ecopolitical Analysis (3 credits)
 - POLI 404** International Institutions (3 credits)
 - POLI 419** Strategic Studies (3 credits)
 - POLI 421** Transnational Politics (3 credits)
 - POLI 422** Canadian Foreign Policy (3 credits)
 - POLI 423** Peace Studies and Global Governance (3 credits)
 - POLI 486** Advanced Seminar in International Relations (3 credits)
-

Group 2: Comparative Politics

- POLI 214** Human Rights: An Overview (3 credits)
- POLI 217** Comparing Democracies (3 credits)
- POLI 301** Social Movements and Protest Politics (3 credits)
- POLI 310** Politics of the U.S. (3 credits)
- POLI 313** Special Topics in Comparative Politics (3 credits)
- POLI 319** European Politics and Government (3 credits)
- POLI 323** Politics of Eastern Europe (3 credits)
- POLI 327** Comparative Democratization (3 credits)
- POLI 328** Public Policy and the Politics of Equality (3 credits)
- POLI 331** Comparative Party Systems (3 credits)
- POLI 333** Politics of Russia (3 credits)
- POLI 335** Politics of China (3 credits)
- POLI 336** Politics of South Asia (3 credits)
- POLI 337** Politics of Japan (3 credits)
- POLI 342** Asia and Power Politics (3 credits)
- POLI 352** Comparative Urban Politics and Government (3 credits)
- POLI 366** Politics of Africa (3 credits)
- POLI 375** Nationalism: Origins, Operation, and Significance (3 credits)
- POLI 379** Politics of Latin America (3 credits)
- POLI 395** Politics of the Middle East (3 credits)
- POLI 405** Comparative Electoral Systems (3 credits)
- POLI 406** Comparative Federalism and Political Integration (3 credits)
- POLI 431** State-Society Relations in China (3 credits)
- POLI 432** Comparative Public Administration and Bureaucracy (3 credits)

- POLI 481** Issues in Western European Politics (3 credits)
 - POLI 483** State and Society in Latin America (3 credits)
 - POLI 484** Post-Communist Democracies (3 credits)
 - POLI 485** Issues in Development and Democracy (3 credits)
 - POLI 487** Advanced Seminar in Comparative Politics (3 credits)
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Group 3: Canadian and Quebec Politics

- POLI 309** Women and Politics in Canada (3 credits)
 - POLI 314** Special Topics in Canadian and Quebec Politics (3 credits)
 - POLI 324** Parliament and the Charter (3 credits)
 - POLI 334** Political Participation in Canada (3 credits)
 - POLI 339** Quebec Politics and Society/La vie politique québécoise (3 credits)
 - POLI 340** Canadian Political Culture (3 credits)
 - POLI 341** Provincial and Territorial Politics (3 credits)
 - POLI 350** Canadian and Quebec Law (6 credits)
 - POLI 351** Canadian Federalism (3 credits)
 - POLI 356** Canadian Political Parties (3 credits)
 - POLI 363** Issues in Canadian Public Policy (3 credits)
 - POLI 365** Canadian Public Administration (3 credits)
 - POLI 367** Quebec Public Administration (3 credits)
 - POLI 393** Advanced Empirical Research Methods (3 credits)
 - POLI 407** Parliamentary Bills of Rights (3 credits)
 - POLI 408** Public Opinion and Public Policy (3 credits)
 - POLI 409** Canada: State/Society Relations (3 credits)
 - POLI 428** Constitutional Politics in Canada (3 credits)
 - POLI 429** Political Socialization in Canadian and Comparative Perspective (3 credits)
 - POLI 488** Advanced Seminar in Canadian and Quebec Politics (3 credits)
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Group 4: Public Policy and Administration

- POLI 212** Politics and Economy (3 credits)
 - POLI 316** Special Topics in Public Policy and Administration (3 credits)
 - POLI 320** Development of Western Legal Systems (3 credits)
 - POLI 327** Comparative Democratization (3 credits)
 - POLI 328** Public Policy and the Politics of Equality (3 credits)
 - POLI 349** Political and Social Theory and the City (3 credits)
 - POLI 352** Comparative Urban Politics and Government (3 credits)
 - POLI 353** Principles of Public Policy (3 credits)
 - POLI 361** Advocacy Groups and Public Policy (3 credits)
 - POLI 362** Policy Analysis and Program Evaluation (3 credits)
 - POLI 363** Issues in Canadian Public Policy (3 credits)
 - POLI 365** Canadian Public Administration (3 credits)
 - POLI 367** Quebec Public Administration (3 credits)
 - POLI 393** Advanced Empirical Research Methods (3 credits)
 - POLI 410** Environmental Policy in the Developing World (3 credits)
 - POLI 411** Gender and Public Policy (3 credits)
 - POLI 412** Comparative Social Policy (3 credits)
 - POLI 413** Theories and Practices of Governance (3 credits)
 - POLI 432** Comparative Public Administration and Bureaucracy (3 credits)
 - POLI 463** Government and Business in Canada (3 credits)
 - POLI 489** Advanced Seminar in Public Policy and Administration (3 credits)
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Group 5: Political Theory

- POLI 306** Classical Political Thought (3 credits)
- POLI 317** Special Topics in Political Theory (3 credits)
- POLI 345** Contemporary Political Philosophy (3 credits)
- POLI 349** Political and Social Theory and the City (3 credits)
- POLI 364** Hellenistic, Roman, Medieval Political Philosophy (3 credits)
- POLI 368** Media, Technology and Politics (3 credits)
- POLI 371** Early Modern Political Philosophy (3 credits)
- POLI 372** Political Science and Scientific Method (6 credits)
- POLI 373** Late Modern Political Philosophy (3 credits)

POLI 384 Principles of Political Theory (3 credits)
POLI 386 Contemporary Liberalism and Its Critics (3 credits)
POLI 389 Religion and Politics (3 credits)
POLI 401 American Political Thought (3 credits)
POLI 414 Authors of Political Imagination (3 credits)
POLI 415 Modern Political Theory and Religion (3 credits)
POLI 416 Ancient Political Texts (3 credits)
POLI 417 Governance (3 credits)
POLI 418 Machiavelli (3 credits)
POLI 425 Foundations of Liberalism (3 credits)
POLI 426 Nietzsche (3 credits)
POLI 427 Political Thought of the Enlightenment (3 credits)
POLI 430 Scientism, Ideology and Liberalism (3 credits)
POLI 433 Critics of Modernity (3 credits)
POLI 490 Advanced Seminar in Political Theory (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.: Explanation of course numbers and the core program:

1. Political Science Honours and Major students should normally complete the 15-credit core program in their first year of full-time equivalent studies. Mature Entry Program (MEP) and Extended Credit Program (ECP) students must consult an academic advisor regarding the completion of the 15-credit core.
2. Courses at the 200 and 300 level are open to all students in other departments and Faculties.
3. Courses at the 400 level are taught as seminars and are generally open to students enrolled in a Political Science program who have successfully completed 60 credits.

POLI 202 *Introduction to Political Science* (3 credits)

This course seeks to develop a broad basis from which to pursue further political inquiry. It offers an introductory examination of basic ideas regarding the state, power, authority, and systems of government. The course examines the diverse approaches to the specific study of political phenomena and provides a fundamental understanding of political concepts.

NOTE: Students who have received credit for POLZ 202 may not take this course for credit.

POLI 203 *Introduction to Comparative Politics* (3 credits)

This course introduces students to the main concepts of comparative political analysis. Major topics include different types of governmental systems and institutions, regime types, electoral systems and political parties, state-society relations, political economy, nationalism, democratization, globalization, and other types of political transformations. By examining several different countries, students gain an understanding of the great diversity of political life and the many ways in which politics affects citizens.

POLI 204 *Introduction to Canadian Politics* (3 credits)

This course is a basic introduction to the fundamental issues of Canadian public life and the federal political system. It presents an overview of the constitution, institutions, political parties, electoral system, interest groups, and public opinion that represent the essential components of Canada's political culture and government.

POLI 205 *Introduction to International Relations* (3 credits)

This course introduces the principal themes, terms, concepts, and debates in the contemporary study of international relations. It provides an historical analysis of global politics and international economy.

POLI 206 *Introduction to Western Political Theory* (3 credits)

This course introduces students to the study of Western political theory through a variety of primary source readings. Assigned texts may be drawn from philosophy, history, literature and other forms of political writing.

POLI 207 *Introduction to Political Science Research* (3 credits)

This course demonstrates how research is conducted in political science. Students learn how to develop a research design. The course introduces them to various research methodologies and provides several approaches for reporting and presenting research.

NOTE: Students who have received credit for POLI 392 may not take this course for credit.

POLI 209 *Public Security and Terrorism* (3 credits)

This course provides an overview of modern terrorism and its evolution, focusing on terrorist movements, groups, and incidents in many parts of the world over time. Students gain an understanding of the theory behind terrorism, its roots, goals, and ideologies, as well as its relation to governments, the media, and the public.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 212 *Politics and Economy* (3 credits)

This course is a general introduction to the interaction between politics and economy. It focuses on the impact of international and national economic structures on domestic political systems.

POLI 213 *Contemporary Issues in Global Politics* (3 credits)

This course introduces students to major trends and issues in world politics, such as human rights, refugees, ethnic conflict, environmental degradation, migration, and the peacekeeping role of the U.N.

NOTE: Students who have received credit for POLZ 213 may not take this course for credit.

POLI 214 *Human Rights: An Overview* (3 credits)

This course introduces students to the historical origins of the concept of human rights; the international regime and the acceptance of several generations of rights such as civil and political rights, economic rights, group rights, and women's rights; the critiques of universalism and the problems of implementation of human rights.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 215 *Global Politics* (3 credits)

This course introduces students to several theoretical perspectives related to global politics, and then examines current events.

The focus is on conflict resolution, the impact of globalization, the roles of international organizations, and information technology.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 216 *Introduction to the United Nations* (3 credits)

This course examines the operations and issues of the United Nations organization. It covers the operation of the Security Council and other components of the United Nations. It surveys micro-issues such as routine operations, the internal bureaucracy, the ethics of its procedures, and its historical background.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 217 *Comparing Democracies* (3 credits)

This course introduces students to the field of comparative politics by examining the institutional structures of established advanced industrial democracies. Particular emphasis is placed on the study of constitutions; the legislative, executive, and the judicial branches of government; and the electoral and party systems.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 219 *Governance and Organized Crime* (3 credits)

This course examines the history, legal processes and the role played by governmental security structures such as the police and the bureaucracy, as well as the international agencies that combat organized crime. To begin with, this course describes and defines organized crime and provides an overview of different theories and models explaining organized crime. Furthermore, the course focuses on certain specific issues such as drug trafficking, prostitution, racketeering, smuggling, and economic crimes. Different types of organized crime groups such as Asian gangs, the Mafia, and outlaw motorcycle gangs — the Hells Angels in particular — are also discussed. Finally, the course examines particular cases of terrorism and structures of governance and how they relate to organized crime.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 285 *Introduction to Law and Society* (3 credits)

This interdisciplinary course examines the roles law plays in society in Canada and internationally, from the perspectives of history, political science, anthropology, sociology, and philosophy.

NOTE: Students who have received credit for ANTH 285, HIST 285, or SOCI 285, or for this topic under an ANTH 298, HIST 298, POLI 298, or SOCI 298 number, may not take this course for credit.

POLI 298 *Selected Topics in Political Science* (3 credits)

POLI 299 *Selected Topics in Political Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 301 *Social Movements and Protest Politics* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course examines the ideas, organization, and actions of such social movements as environmentalism, peace, human rights, labour, feminism, and antiglobalization. Theories of social movement mobilization, influence across national contexts, and the politics of protest are given particular attention.

POLI 302 *International Security* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course examines the causes of war and peace in the international system. It studies the impact on war and peace of such influences as cognitive psychology, identity, group decision-making, bureaucratic processes, regime types, conflict spirals, arms control, arms races, balance of power, hegemonic stability theory, trade interdependence, environment and non-renewable resources, and international institutions.

NOTE: Students who have received credit for this topic under a POLI 298 number may not take this course for credit.

POLI 304 *Theories of Foreign Policy Making* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course explores the major international and domestic determinants of foreign policy. Principal topics include the influence on foreign policy of the international system, geography, leadership, regime-type, transnationalism, and non-governmental organizations. This course draws upon the experiences of a variety of Western democratic states.

NOTE: Students who have received credit for POLI 338 or for this topic under a POLI 398 number may not take this course for credit.

POLI 305 *International Political Economy* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course examines institutions, processes, and issues in economic relations between states. Topics covered include theories of international political economy (IPE), international trade, global finance, multinational corporations, economic development, globalization, and regional blocs.

NOTE: Students who have received credit for POLZ 305 may not take this course for credit.

POLI 306 *Classical Political Thought* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course focuses on the foundations of Western political thinking in ancient Greece. Through a careful examination of texts by Greek poets, historians and philosophers, concepts such as nature and convention, regime types, and justice and the good life are explored.

POLI 309 *Women and Politics in Canada* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the role of women in Canadian politics at the federal, provincial, and local level. Historical, theoretical, and legal perspectives are examined and include the politics of racism; sexuality; community organizing; suffrage; and representation within formal political structures. It focuses on the diversity and development of the women's movement in Canada.

POLI 310 *Politics of the U.S.* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course surveys the structures and dynamics that inform the contemporary American political process. In addition to studying the traditional governmental institutions, the course aims to provide a foundation for understanding and critically analyzing public opinion, the media and elections, federalism, political parties and interest groups, civil rights and civil liberties, and current issues in public policy.

POLI 311 *International Public Law* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course explores the meaning, effectiveness, and potential of interstate law. Among the topics covered are the source and development of international law; the role of the International Court of Justice; sovereignty, territory, and natural resources; human rights violations, the state and war crimes tribunals; and international environmental law.

POLI 312 *Special Topics in International Politics* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 313 *Special Topics in Comparative Politics* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 314 *Special Topics in Canadian and Quebec Politics* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 315 *International Organizations* (3 credits)

Prerequisite: POLI 205 or 207; or permission of the Department. This course offers an overview of international institutions and global governance. It examines major theoretical perspectives on international organizations, and addresses the role of the United Nations system, regional organizations, and non-governmental organizations in promoting international co-operation to address collective problems.

POLI 316 *Special Topics in Public Policy and Administration* (3 credits)

Prerequisite: POLI 207; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 317 *Special Topics in Political Theory* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 318 *Introduction to Strategic Studies* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course is an introductory examination of the theoretical aspects of strategic studies, including the principles of war, as they apply to combat on land, at sea, and in the air.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 319 *European Politics and Government* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course is a study of government and politics in selected European countries. It provides an analysis of political institutions, cultures, and processes.

POLI 320 *Development of Western Legal Systems* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course is an overview of the major legal systems of the Western world, with a special focus on the recent transformation relating to economic problems, social structures, culture, and ethnic conflicts, as well as the role of governmental policies in domestic and foreign affairs.

POLI 323 *Politics of Eastern Europe* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course studies the political process and institutions of the region, with a special focus on the recent transformation relating to economic problems, social structures, culture, and ethnic conflicts, as well as the role of governmental policies in domestic and foreign affairs.

POLI 324 *Parliament and the Charter* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the judicial and parliamentary responses to the Canadian Charter of Rights and Freedoms. Particular attention is paid to the judicialization of politics and the emerging dialogue on rights between courts and legislatures in important areas of public policy.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 327 *Comparative Democratization* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course discusses the nature of democracy and the challenges of democratization, drawing on experiences with democratization in Southern Europe, Latin America, Eastern Europe, and Africa. Students assess prospects for democratization and consider how other countries might encourage greater democracy in countries currently experiencing regime change.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 328 *Public Policy and the Politics of Equality* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course reviews theoretical debates about the role of the state and the individual, collective and individual rights, integration, and the role of cultural diversity and identity. It examines selected policy demands of women, the poor, refugees, and other constituencies.

POLI 329 *American Foreign Policy* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course covers the sources and significance of American foreign policy, including the U.S. foreign policy-making process, the political and historical context of U.S. foreign policy decision making, and the nature and dimensions of contemporary American power. Major theoretical and policy debates are considered.

POLI 331 *Comparative Party Systems* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course introduces students to the academic study of political parties and party systems. It examines the determinants of party behaviour from a number of theoretical perspectives, including historical, sociological and institutional. The topics covered include, but are not limited to, the number of parties, electoral systems, party finance, leadership selection, and government formation and stability. Specific case studies are selected both from established and new democracies.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 332 *Theories of International Relations* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course provides an introduction to international relations theory, covering the major debates between realism, liberalism, constructivism, and critical theory, as well as competing epistemological and methodological orientations.

POLI 333 *Politics of Russia* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course is a study of the government and politics of the old and the new Russia, including emerging political, social, and economic structures, conflicts, and issues.

POLI 334 *Political Participation in Canada* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the various approaches to understanding the participation of the public in politics, primarily electoral but also non-electoral activities, in Canada and from a comparative perspective.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 335 *Politics of China* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course focuses on political development of China. Topics include political mobilization, economic development, democracy, and the policy process.

POLI 336 *Politics of South Asia* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course examines in a comparative manner the political systems of South Asian countries in light of their socio-economic environment. Specific emphasis is placed on four countries —

India, Pakistan, Bangladesh, and Sri Lanka. After a comprehensive study of the social and political structure of these countries, agrarian and industrial policies are evaluated.

POLI 337 *Politics of Japan* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course focuses on the political development of Japan since the end of World War II. Emphasis is placed on Japanese modernization, post-industrial politics, national security and constitutional pacifism.

POLI 339 *(also listed as SCPA 339)*

***Quebec Politics and Society/ La vie politique québécoise* (3 credits)**

Prerequisite: POLI 204 and 207; or permission of the Department. This course is a study of the changing party structure and political issues in Quebec and their relationship to constitutional, cultural, and economic factors.

On étudiera dans ce cours l'évolution structurelle des partis et des questions politiques au Québec en fonction de facteurs d'ordre constitutionnel, culturel et économique.

NOTE: Students who have received credit for POLI 211 or SCPA 211 may not take this course for credit.

NOTE: The course will be offered in both English and French on a rotational basis. Please consult the Undergraduate Class Schedule for details.

POLI 340 *Canadian Political Culture* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course approaches Canadian politics from a societal perspective. The objective is to develop a better understanding of Canada's political culture through a cross-time and cross-national analysis.

POLI 341 *Provincial and Territorial Politics* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course analyzes regional political cultures in Canada including the development of provincial political parties and public administrations, the rise of third parties, provincial and territorial constitutional positions, electoral behaviour, and institutional reform in the northern Territories.

NOTE: Students who have received credit for POLI 438 may not take this course for credit.

POLI 342 *Asia and Power Politics* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course examines the politics of regional powers in Asia and explores the international relations of several Asian countries, in particular India, China, Japan, Indonesia, and Vietnam.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 345 *Contemporary Political Philosophy* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines the character of contemporary political theory when viewed from both a modernist and an anti-modernist understanding of political life. The course also involves an examination into what it means to be modern and whether the critique of modernity is itself a very modern activity.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 349 *Political and Social Theory and the City* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines the theoretical and ideological aspects of city government in historical and normative perspective.

POLI 350 *Canadian and Quebec Law* (6 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course is an introduction to Canadian and Quebec law. It emphasizes certain areas of criminal law, the Canadian Charter of Rights and Freedoms, and Quebec civil law. An analysis is undertaken of the criminal court structure and criminal procedure, legal constitutional rights; the civil court structure and civil court procedures.

POLI 351 *Canadian Federalism* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course is a critical and analytical study of the theory of federalism, its principles, and techniques, and the response of Canadian federal systems to the demands of cultural dualism and regional pressures.

POLI 352 *Comparative Urban Politics and Government* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course deals with politics and government in selected Canadian cities, with comparative reference to cities elsewhere in the world.

POLI 353 *Principles of Public Policy* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the concepts, theories and approaches to the study of public policy. It also explores the major actors, processes and institutions involved in the development of public policy from a Canadian and/or comparative perspective. Topics include the role of the bureaucracy, globalization and internationalization, and state-society relations in policy-making.

POLI 356 *Canadian Political Parties* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course provides a comprehensive examination of the origins and development of political parties in Canada at both the federal and provincial levels. Theories about party development, including one party dominance, brokerage politics and third party development, are examined in order to determine the efficacy of political parties.

POLI 361 *Advocacy Groups and Public Policy* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. Students examine the broad social, economic, political, and cultural forces shaping governmental decisions and policies. Particular attention is paid to the conflict between private and public concerns.

POLI 362 *Policy Analysis and Program Evaluation* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course provides a basic understanding of various approaches to policy planning and policy evaluation. Special emphasis is placed on various conceptual, methodological, and ethical issues emergent in the evaluation of governmental policy performance.

POLI 363 *Issues in Canadian Public Policy* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. The course examines alternative public policies in selected areas at the federal, provincial, and municipal levels in Canada. Policies analyzed vary from year to year and include such areas as social welfare, culture, education, language, environmental protection, energy conservation, urban renewal, and economic policy.

POLI 364 *Hellenistic, Roman, Medieval Political Philosophy* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines the political teachings of the Hellenistic schools such as the Academics, the Stoics, the Epicureans and the Skeptics, the political writings from the Roman Republic and Empire, and the political problematics posed by early Christianity.

POLI 365 *Canadian Public Administration* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the organization and composition of the federal bureaucracy, the role of the bureaucracy in the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 366 *Politics of Africa* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course is a comparative study of political institutions and processes in selected African countries. Countries selected may vary from year to year.

NOTE: Students should consult the Department for current topic.

POLI 367 *Quebec Public Administration* (3 credits)

Prerequisite: POLI 204 and 207; or permission of the Department. This course examines the organization and composition of Quebec bureaucracy, the role of civil servants and the making and implementation of public policy, patterns of recruitment, and the mechanisms of accountability and control.

POLI 368 *Media, Technology and Politics* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines the impact upon politics of changes in technology and the media. Students discuss a diverse range of contemporary thinkers and their understanding of the digital future. Particular attention is paid to the age of electronic politics and its effect upon the actual practice of political power.

POLI 371 *Early Modern Political Philosophy* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. Students are introduced to the origins of modern political thought from the Renaissance and the Reformation through to the mid-18th century.

POLI 372 *Political Science and Scientific Method* (6 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course focuses on contemporary interpretations of reasoning by natural scientists (i.e. empiricism, philosophical relativism and philosophical realism), and inquires into the implications of each of these interpretations for the study of the social sciences in general and political science in particular.

POLI 373 *Late Modern Political Philosophy* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines the progression and criticism of modern political thought from the mid-18th century through to the early-20th century.

POLI 375 *Nationalism: Origins, Operation, and Significance* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. Using specific case studies, this course examines the theories of nationalism developed originally in the early-19th century as a purely European phenomenon. It relates the rise of nationalism to the processes of modernization.

POLI 379 *Politics of Latin America* (3 credits)

Prerequisite: POLI 203 and 207; or permission of the Department. This course examines the political structures and processes of selected countries in South America, Central America, and the Caribbean. Countries selected may vary from year to year.

NOTE: Students should consult the Department for current topic.

POLI 384 *Principles of Political Theory* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course is an intensive study of a basic work by a major thinker such as Plato, Aristotle, Machiavelli, Hobbes or Hegel. It examines a major text such as Plato's *Laws* or Hegel's *Phenomenology* as well as commentaries on it, while attempting to explore systematically the issues and problems raised by the text and the interpretative traditions that follow from it.

POLI 386 *Contemporary Liberalism and Its Critics* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course examines recent developments in the theory and practice of liberalism, as well as criticisms of liberal principles and the liberal way of life from a range of contemporary perspectives.

POLI 388 *Human Rights and International Justice* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course surveys normative questions comprising human rights discourse, with an emphasis on international efforts to promote human rights standards. Topics include the role of the United Nations, the North-South debate, environmental security, the obligation of individuals and states, women's rights and the work of non-governmental organizations. Special consideration is given to the controversy between the universal and particular applications of human rights.

NOTE: Students who have received credit for POLZ 388 may not take this course for credit.

POLI 389 *Religion and Politics* (3 credits)

Prerequisite: POLI 206 and 207; or permission of the Department. This course studies the relationship between religion and politics with reference to historical, philosophical, theological and contemporary political thought.

NOTE: Students who have received credit for this topic under a POLI 398 number may not take this course for credit.

POLI 391 *Middle East and Global Conflict* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course is a study of the Middle East in transition, conflict and ideology in a global context of changing regional alliances. Topics include regional conflicts such as the Arab-Israeli conflict, the Iraq-Iran war, the Gulf crisis, foreign policy process, and the end of the cold war and its impact in the new millennium.

POLI 393 *Advanced Empirical Research Methods* (3 credits)

Prerequisite: POLI 207; or permission of the Department. This course presents quantitative and qualitative approaches to data analysis.

POLI 394 *Globalization and Sustainable Development* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course is an introduction to the emerging field of global environmental politics. It surveys the present environmental crisis and the roles of states, international organizations, and civil society. Various case studies dealing with oceans, forests, fisheries, biodiversity, global warming, and others are used to illustrate the inherent complexity of transnational ecological issues in the era of globalization.

NOTE: Students who have received credit for POLZ 394 may not take this course for credit.

POLI 395 *Politics of the Middle East* (3 credits)

Prerequisite: POLI 205 and 207; or permission of the Department. This course is a comparative study of the government and politics of Arab North Africa, the Fertile Crescent, and the Arabian peninsula. Countries and topics covered may vary from year to year.

NOTE: Students should consult the Department for current topic.

POLI 396 *Honours Tutorial* (3 credits)

Prerequisite: Enrolment in the Honours (Thesis Option B) in Political Science. This course requires students to conduct a literature review in a topic to be chosen for their thesis, complete a bibliography, and work on their methodological approaches.

POLI 398 *Selected Topics in Political Science* (3 credits)

POLI 399 *Selected Topics in Political Science* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

POLI 400 *Advanced Seminar in International Relations Theory* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department. This course addresses central questions of international relations theory, such as the causes of war, the paths to peace and co-operation, and the relationship between power and wealth. Students consider major paradigmatic approaches to these questions from realist, liberal and constructivist perspectives, as well as the utility of eclectic or cross-paradigmatic approaches.

NOTE: Students who have received credit for this topic under a POLI 486 number may not take this course for credit.

POLI 401 *American Political Thought* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar examines texts articulating the theoretical foundations and historical development of the American regime, with attention to the relationship between the institutions, processes, individuals and ideas shaping the American way of life.

POLI 402 *Advanced International Political Economy* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205, 207 and 305; or permission of the Department. This course covers both the major theoretical approaches in International Political Economy (IPE) and the practical efforts of states to shape, control, and adapt to the international economic system. Students develop and continually practise the skills of logically coherent analysis, discussion, and presentation.

NOTE: Students who have received credit for this topic under a POLI 486 number may not take this course for credit.

POLI 403 *Global Ecopolitical Analysis* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205, 207 and 394; or permission of the Department. This seminar course contextualizes contemporary ecological problems and global governance efforts to mitigate them. Students analyze multilateral environmental agreements in depth and explore various policy options that promise to anticipate future international ecopolitical issues.

NOTE: Students who have received credit for this topic under a POLI 486 number may not take this course for credit.

POLI 404 *International Institutions* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205, 207 and 315; or permission of the Department. This course is an advanced seminar covering major theoretical perspectives on the significance in world politics of international institutions and regimes, and of inter-governmental and non-governmental organizations.

NOTE: Students who have received credit for this topic under a POLI 486 number may not take this course for credit.

POLI 405 *Comparative Electoral Systems* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; or permission of the Department. This course focuses on the various political and policy impacts that electoral laws have on party competition in both advanced industrialized and less developed democracies. The course introduces students to the detailed study of both the structure and the consequences of the main electoral systems.

POLI 406 *Comparative Federalism and Political Integration* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; or permission of the Department. This course begins by examining the theories of political integration, federalism and nationalism, and the various policy instruments available to the modern state to achieve integration, before moving to an analysis of the current situation in a range of modern federal states as well as the emerging confederal system of the European Union.

NOTE: Students who have received credit for this topic under a POLI 498 number may not take this course for credit.

POLI 407 *Parliamentary Bills of Rights* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204 and 207; or permission of the Department. This seminar explores the political origins and functioning of bills of rights in selected parliamentary democracies. Particular attention is paid to the "judicialization of politics" and the attempts to promote institutional dialogue between judicial and parliamentary actors in Westminster systems such as Canada, Australia, New Zealand and the United Kingdom.

NOTE: Students who have received credit for this topic under a POLI 488 number may not take this course for credit.

POLI 408 *Public Opinion and Public Policy* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204 and 207; or permission of the Department. By relying on examples from Quebec and Canada, this seminar focuses on the role of public opinion in shaping public policy. It offers an overview of scholarly debate and research on public opinion and political communication.

NOTE: Students who have received credit for this topic under a POLI 498 number may not take this course for credit.

POLI 409 *Canada: State-Society Relations* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204 and 207; or permission of the Department. The current research associated with the perception of a growing sense of democratic malaise and political discontent has prompted several academics to assess the current state of Canadian democracy. Students examine and discuss the current research and critically analyze the implications for Canada's state-society relations.

NOTE: Students who have received credit for this topic under a POLI 488 number may not take this course for credit.

POLI 410 *Environmental Policy in the Developing World* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203; and POLI 207 or GEOG 300; or permission of the Department. This course surveys the interactions between development strategies and the environment. In particular, consideration is given to the environmental ramifications of large development projects, different systems of property rights, decentralization, international debt, and foreign aid in the context of forests, rivers, rangeland, wildlife, and groundwater. Students also discuss the challenges — developmental and environmental — associated with managing highly valuable natural resources. Examples are drawn from throughout the developing world.

NOTE: Students who have received credit for this topic under a POLI 487 number may not take this course for credit.

POLI 411 Gender and Public Policy (3 credits)

Prerequisite: See N.B. number (3) and POLI 207; and POLI 353 or 365; or permission of the Department. This course fosters an understanding of the theoretical and practical issues surrounding the study of gender and public policy and introduces them to recent scholarship in this area. Students examine a number of themes and debates, including gender and policy studies, gender and the welfare state, women's groups in the policy process, and feminist perspectives on the bureaucracy.

NOTE: Students who have received credit for this topic under a POLI 498 number may not take this course for credit.

POLI 412 Comparative Social Policy (3 credits)

Prerequisite: See N.B. number (3) and POLI 207 and 353; or permission of the Department. This seminar examines various explanations for the development and retrenchment of the welfare state in different countries. It analyzes typologies developed to conceptualize welfare-state regimes and examines, in a comparative fashion, key social policies such as health, pensions, and employment.

NOTE: Students who have received credit for POLI 461 may not take this course for credit.

POLI 413 Theories and Practices of Governance (3 credits)

Prerequisite: See N.B. number (3) and POLI 207; and POLI 353 or 365; or permission of the Department. This course examines the mechanisms, processes, and institutions that influence decisions concerning public life. It explores the interaction among the state, the private sector and civil society in social and economic development. Topics may include new public management, public-private partnerships, representation and citizen participation in policy-making, alternative service delivery, and public accountability.

POLI 414 Authors of Political Imagination (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar considers the political impact of contingent narrative approaches to shifts in an individual's political imagination as opposed to purely rational or universally applicable philosophical arguments. The political potential of a broad range of literary styles, such as poetry, drama and the short story, is discussed alongside texts from the fields of philosophy, neuroscience and rhetoric so that their respective impacts can be assessed.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 415 Modern Political Theory and Religion (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar explores the use and abuse of religious ideas, texts and traditions in the theoretical foundations of modernity such as ethical priorities and orientations, political and social institutions, and the purposes and status of science, found at the core of modern life.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 416 Ancient Political Texts (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar explores, by careful reading of philosophic, poetic, or historical texts, the ancient political conceptualizations that frame and contribute to Western political ideas, issues and goals.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 417 Governance (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar investigates how the efforts of governments to control the lives, thoughts and thought processes of the members of society are central to the modern governmental process and how they have been part of the agenda since the beginning of the late modern era.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 418 Machiavelli (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar acquaints students with the arguments surrounding Machiavellian scholarship in particular and Renaissance political issues in general. Students study two of Machiavelli's canonical texts (*The Prince* and *The Discourses*) in addition to his less well known but essential contribution to Florentine historiography (*Florentine Histories*). The political and literary context of Machiavelli's writings, and how it colours contemporary criticism, is discussed.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 419 Strategic Studies (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department. This seminar covers the theory and application of nuclear weapons as a means of deterrence to warfare. It surveys issues in nuclear control, missile defense, and deterrence design. Through simulations, special attention is given to contrasting theories on the utility of nuclear force.

POLI 421 Transnational Politics (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department. This seminar examines the activities of non-state actors, including NGOs, social movements, corporations, and individuals, and their roles in creating global society, building international institutions, and shaping foreign policy. Emphasis is placed on theories which seek to explain the relative influence of these actors in the international political system.

POLI 422 Canadian Foreign Policy (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department. This course examines Canada's foreign policy. In this seminar, particular emphasis is given to the decision-making process by which foreign policy is formulated and implemented, with particular reference to Canadian relations vis-à-vis the United States, the Commonwealth, and the developing countries.

POLI 423 *Peace Studies and Global Governance* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 302; or permission of the Department. This seminar focuses on the theory and practice of peace amongst nations. The course begins with a survey of analyses explaining the causes of aggression, war and peace, including theories of structural violence and revolution; nationalism and cosmopolitanism. It then examines the roles played by the state, international organizations, and peace movements, focusing on global and regional disarmament initiatives and peace-keeping.

POLI 425 *Foundations of Liberalism* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar examines the genesis, principles and purposes of classical liberalism as it is articulated by early modern authors. This involves investigating conceptions of and arguments for personal freedom, natural equality, private property, individual rights and limited government, among other topics. It then explores the subsequent development and distortion of liberal ideas by later theorists in the tradition.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 426 *Nietzsche* (3 credits)

Prerequisite: N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar is devoted to an exploration of the philosophical teaching of Friedrich Nietzsche and the subsequent influence of this teaching on the political and spiritual developments of Western culture. Nietzsche's influence on such movements as deconstruction, nihilism, and postmodernism is explored.

NOTE: Students who have received credit for this topic under a POLI 498 number may not take this course for credit.

POLI 427 *Political Thought of the Enlightenment* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This course examines the impact of Enlightenment thinking in Europe, especially Scotland and the reformed parts of Northern France, Switzerland, the Netherlands, and the German states.

NOTE: Students who have received credit for this topic under a POLI 498 number may not take this course for credit.

POLI 428 *Constitutional Politics in Canada* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204 and 207; or permission of the Department. This seminar considers the emergence of "mega constitutional politics" in the 1960-1995 period involving state and societal actors. Topics include the Victoria Charter, Patriation, Meech Lake Accord, Charlottetown Accord, the 1980 and 1995 Quebec referenda, and attempts at non-constitutional reform since 1995.

NOTE: Students who have received credit for this topic under a POLI 488 number may not take this course for credit.

POLI 429 *Political Socialization in Canadian and Comparative Perspective* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department. This course aims at understanding the social origins of political opinions, attitudes and values, under what conditions they change, and how they affect political dynamics in Canada and in a comparative perspective.

NOTE: Students who have received credit for this topic under a POLI 487 number may not take this course for credit.

POLI 430 *Scientism, Ideology and Liberalism* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar examines contemporary approaches to scientific and ideological explanations of political activity, and analyzes the relationship between science and ideology and contemporary liberalism. Students discuss the works of prominent contemporary thinkers who offer a critique of scientific and/or ideological politics and who propose a non-ideological liberalism.

NOTE: Students who have received credit for this topic under a POLI 490 number may not take this course for credit.

POLI 431 *State-Society Relations in China* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; or permission of the Department. This course explores different approaches to the study of state-society relations in the People's Republic of China. Specifically, the course considers the applicability of concepts such as neo-traditionalism, state reach, corporatism, civil society, and rightful resistance, during both the Maoist and reform eras.

NOTE: Students who have received credit for this topic under a POLI 487 number may not take this course for credit.

POLI 432 *Comparative Public Administration and Bureaucracy* (3 credits)

Prerequisite: N.B. number (3) and POLI 204 and 207; or permission of the Department. This course examines the theories and the development of public administration within a comparative context. Using a Weberian framework of bureaucracy, the course critically evaluates the formal-rational concepts of bureaucracy in relation to case studies of public services in Europe and the new bureaucratic structures developed in other countries.

NOTE: Students who have received credit for POLI 380 may not take this course for credit.

POLI 433 *Critics of Modernity* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department. This seminar studies selected writings by major critics of modernity during the 20th century. The authors studied may include Hannah Arendt, Albert Camus, Fyodor Dostoevsky, George Grant, Bertrand de Jouvenel, Alasdair MacIntyre, Jacques Maritain, Richard Niebuhr, Michael Oakeshott, Leo Strauss, Charles Taylor, and Eric Voegelin.

POLI 463 *Government and Business in Canada* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204, 207 and 353; or permission of the Department. This seminar in public policy is designed to explore the relationship between government and business in Canada. Particular attention is paid to the formation and implementation of policy intended to promote and control enterprise, and the role of government as entrepreneur.

POLI 481 *Issues in Western European Politics* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; or permission of the Department. This seminar examines the nature of politics of the states and societies of Western Europe, including the significance of their membership in the European Union.

POLI 483 *State and Society in Latin America* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203, 207 and 379; or permission of the Department. This seminar examines the nature of politics in Latin America. A specific focus is placed on selective issues of state-society relations, and the emergence of new political forces and institutions in response to changes in the socio-economic structure of the region.

POLI 484 *Post-Communist Democracies* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; and POLI 323 or 333; or permission of the Department. This seminar reviews the post-communist states' transition to democracy and their state-formation. The seminar focuses on the interplay between the forces of nationalism, ethnicity, identity, and the transition to democratic structures.

POLI 485 *Issues in Development and Democracy* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203; or permission of the Department. This seminar focuses on the political and economic problems of the new nations. A particular emphasis is placed on understanding the process of development and state formation within a democratic context.

POLI 486 *Advanced Seminar in International Relations* (3 credits)

Prerequisite: See N.B. number (3) and POLI 205 and 207; or permission of the Department.

POLI 487 *Advanced Seminar in Comparative Politics* (3 credits)

Prerequisite: See N.B. number (3) and POLI 203 and 207; or permission of the Department.

POLI 488 *Advanced Seminar in Canadian and Quebec Politics* (3 credits)

Prerequisite: See N.B. number (3) and POLI 204 and 207; or permission of the Department.

POLI 489 *Advanced Seminar in Public Policy and Administration* (3 credits)

Prerequisite: See N.B. number (3) and POLI 207; POLI 353 or 365; or permission of the Department.

POLI 490 *Advanced Seminar in Political Theory* (3 credits)

Prerequisite: See N.B. number (3) and POLI 206 and 207; or permission of the Department.

Advanced seminars deal with selected topics in sub-fields of political science. Topics vary from year to year.

NOTE: Students should consult the Department for a description of these courses.

POLI 495 *Honours Thesis* (6 credits)

Prerequisite: Enrolment in the Honours (Thesis Option B) in Political Science. The student works with an individual faculty member in a particular field of study in Political Science. Students are asked to produce a sustained piece of written work to be defended before a departmental committee.

POLI 496 *Honours Seminar* (3 credits)

Prerequisite: Permission of the Department. This seminar involves the student in formulating an honours research proposal, and the research and writing of an honours paper. Topics of the seminar vary from year to year.

POLI 497 *Internship* (3 credits)

Prerequisite: Permission of the Department. The internship is a one-term apprenticeship in some aspect of public affairs and policy analysis. Placements may be drawn from all areas of possible employment, including private sector, government and community organizations. Students are asked to submit a written report which summarizes and evaluates their work experience.

NOTE: Eligible students should have completed 39 credits in Political Science and must have an excellent academic record with a minimum GPA of 3.5. The undergraduate committee of the Department will determine the eligibility of the student and will approve the internship. Students should consult the Department for further information.

POLI 498 *Advanced Topics in Political Science* (3 credits)

Prerequisite: See N.B. number (3) and POLI 207; and POLI 203, 204, 205 or 206; or permission of the Department. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.250

PSYCHOLOGY

Faculty

Chair

JEAN-ROCH LAURENCE, PhD C'dia., Professor

Distinguished Professors Emeriti

ZALMAN AMIT, PhD McG.

TANNIS ARBUCKLE-MAAG, PhD Tor.

ANNA-BETH DOYLE, PhD Stan.

ALEX E. SCHWARTZMAN, PhD Tor.

JANE STEWART, PhD Lond.

Professors

SHIMON AMIR, PhD McG., Provost's Distinction

LOUIS BHERER, PhD Montr.

WILLIAM BUKOWSKI, PhD Mich. State

JUNE S. CHAIKELSON, PhD McG.

MICHEL DUGAS, PhD Laval

REX B. KLINE, PhD Wayne State

VIRGINIA B. PENHUNE, PhD McG.

JAMES G. PFAUS, PhD Br.Col.

NATALIE PHILLIPS, PhD Dal.

DIANE POULIN-DUBOIS, PhD Montr.

NORMAN SEGALOWITZ, PhD Oxf.

LISA SERBIN, PhD S.U.N.Y.(Stony Brook)

PETER SHIZGAL, PhD Penn., Provost's Distinction

DALE M. STACK, PhD Qu.

CARSTEN WROSCH, PhD Berlin

Associate Professors

ANDREAS ARVANITOGIANNIS, PhD C'dia.

WAYNE BRAKE, PhD McG.

C. ANDREW CHAPMAN, PhD McM.

MICHAEL CONWAY, PhD Wat.

ROBERTO DE ALMEIDA, PhD Rutgers

MARK ELLENBOGEN, PhD C'dia.

CONSTANTINA GIANNOPOULOS, PhD C'dia.

RICK GURNSEY, PhD Qu.

AARON JOHNSON, PhD Glas.

KAREN Z. LI, PhD Tor.

JENNIFER McGRATH, PhD Bowling Green State

SYDNEY B. MILLER, PhD McG.

DAVID MUMBY, PhD Br.Col.

ADAM RADOMSKY, PhD Br.Col.

ANDREW RYDER, PhD Br.Col.

URI SHALEV, PhD Tel Aviv

Assistant Professors

ERIN T. BARKER, PhD Alta.

KRISTA BYERS-HEINLEIN, PhD Br.Col.

NADIA CHAUDHRI, PhD Pitt.

JEAN-PHILIPPE GOUIN, PhD Ohio State

ROISIN O'CONNOR, PhD S.U.N.Y.(Buffalo)

Affiliate Professors

SAM BURSTEIN, PhD Wat.

PAUL D. HASTINGS, PhD Tor.

Senior Lecturers
THERESA BIANCO, PhD W.Austr.
LUCIE BONNEVILLE, PhD C'dia.

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus
Psychology Building, Room: PY 146
514-848-2424, ext. 2222

Richard J. Renaud Science Complex, Room: SP 244

Department Objectives

Psychology is the scientific study of mental life, both its neurological bases and its manifestations in behaviour. Psychology also examines the factors that promote change in behaviour and mental activity. Through teaching and research, the Department serves the community by furthering such knowledge and applying it to promote human welfare. The commitment of faculty members to research assures that students keep up with current developments. Their involvement in community programs keeps students and faculty alike in close touch with the practical application of the discipline.

Programs

The Psychology Department offers minor, major, specialization, and honours programs. Both BA and BSc degrees are offered, and students may also choose a Behavioural Neuroscience option for these degrees. Students planning a career or graduate studies in psychology are normally expected to follow the appropriate honours or specialization program. Students planning to pursue graduate studies in clinical psychology should ensure that the course electives they choose coincide with requirements of the licensing boards. The major program is designed for students who wish to concentrate their studies in psychology but at the same time wish to pursue general education in other disciplines. The major program can be combined with a major in another department. Students registered in the Honours, Specialization, or Major in Psychology may select Psychology electives in various Content Areas in order to obtain a broad overview of the discipline. The five Content Areas within the Department are Social, Personality, and Culture; Developmental; Clinical and Health; Behavioural Neuroscience; and Cognitive Science. It is possible for students to pursue in-depth studies within these specific Content Areas by taking Tier 2 courses. The minor program can be taken only by students registered in another degree program and provides the opportunity to gain basic exposure to the main sub-disciplines of psychology or to pursue one such area in some depth. Students are strongly encouraged to take advantage of academic counselling services available in the Psychology Department in order to select the program and courses that best meet their needs. Students are ultimately responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits. Students must have a GPA of 3.5 in Psychology courses to qualify for entry to honours.

For additional information concerning programs and courses, students should consult the Department.

66 BA Honours in Psychology

- 30 Core Requirements (PSYC 305³, 310³, 311³, 315³, 316³, 355³, 490³, 491³, 495⁶)
- 15 Chosen from Tier 1 with at least:
 - 6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area
 - 6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area
- 12 Chosen from at least two different Tier 2 Content Areas
- 9 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

66 BSc Honours in Psychology

- 30 Core Requirements (PSYC 305³, 310³, 311³, 315³, 316³, 355³, 490³, 491³, 495⁶)
- 15 Chosen from Tier 1 with at least:
 - 6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area
 - 6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area
- 12 Chosen from at least two different Tier 2 Content Areas
- 9 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

NOTE: In addition, students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology program advisor.

NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

66 BSc Honours in Psychology (Behavioural Neuroscience Option)

30 Core Requirements (PSYC 305³, 310³, 311³, 315³, 316³, 355³, 490³, 491³, 495⁶)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

12 Chosen from the Tier 2 Behavioural Neuroscience Content Area and PSYC 445³

9 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

An additional 21 Science credits as specified below:

9 CHEM 221³, 222³, 271³

3 BIOL 225³ or 226³

9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 364³, 367³, 462³; CHEM 478³

60 BA Specialization in Psychology

15 Core Requirements (PSYC 305³, 310³, 315³, 316³, 355³)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

12 Chosen from at least two different Tier 2 Content Areas

18 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

60 BSc Specialization in Psychology (Behavioural Neuroscience Option)

15 Core Requirements (PSYC 305³, 310³, 315³, 316³, 355³)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

12 Chosen from the Tier 2 Behavioural Neuroscience Content Area and PSYC 445³

18 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

An additional 21 Science credits as specified below:

9 CHEM 221³, 222³, 271³

3 BIOL 225³ or 226³

9 Chosen from BIOL 225³, 226³, 227³, 261³, 266³, 321³, 364³, 367³, 382³, 462³; CHEM 478³

60 BSc Specialization in Psychology

15 Core Requirements (PSYC 305³, 310³, 315³, 316³, 355³)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

12 Chosen from at least two different Tier 2 Content Areas

18 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

NOTE: In addition, students must complete a minimum of 15 science credits outside the Department. The courses must be selected in consultation with a Psychology program advisor.

NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

42 BA Major in Psychology

12 Core Requirements (PSYC 305³, 310³, 315³, 355³)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

15 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

42 BSc Major in Psychology

12 Core Requirements (PSYC 305³, 310³, 315³, 355³)

15 Chosen from Tier 1 with at least:

6 chosen from the Social, Personality, and Culture Content Area and the Developmental Content Area

6 chosen from the Behavioural Neuroscience Content Area and the Cognitive Science Content Area

15 Psychology elective credits at the 300 or 400 level selected in consultation with a Psychology program advisor

NOTE: Students must have completed an appropriate program of science prerequisites in order to be admitted to BSc programs.

24 Minor in Psychology

6* PSYC 200

6 Core Requirements (PSYC 310³, 315³)

12 Psychology elective credits with a minimum of nine credits at the 300 level selected in consultation with a Psychology program advisor

**Students exempted from PSYC 200 will replace the credits with 300- or 400-level PSYC.*

Core Requirements

FOR MINOR

PSYC 310 Research Methods and Designs I (3 credits)
PSYC 315 Statistical Analysis I (3 credits)

PLUS FOR MAJOR

PSYC 305 History and Systems (3 credits)
PSYC 355 Fundamentals of Behavioural Neurobiology (3 credits)

PLUS FOR SPECIALIZATION

PSYC 316 Statistical Analysis II (3 credits)

PLUS FOR HONOURS

PSYC 311 Research Methods and Designs II (3 credits)
PSYC 490 Honours Seminar Topics (3 credits)
PSYC 491 Honours Seminar Issues (3 credits)
PSYC 495 Honours Thesis (6 credits)

TIER 1

Social, Personality, and Culture Content Area

PSYC 321 Fundamentals of Personality (3 credits)
PSYC 325 Fundamentals of Social Psychology (3 credits)

Developmental Content Area

PSYC 333 Fundamentals of Lifespan Development (3 credits)

Clinical and Health Content Area

PSYC 340 Fundamentals of Psychopathology (3 credits)
PSYC 341 Fundamentals of Health Psychology (3 credits)
PSYC 342 Forensic Psychology (3 credits)

Behavioural Neuroscience Content Area

PSYC 351 Fundamentals of Learning (3 credits)
PSYC 354 Evolutionary Foundations of Psychology (3 credits)

Cognitive Science Content Area

PSYC 363 Fundamentals of Sensation and Perception (3 credits)
PSYC 364 Fundamentals of Cognition (3 credits)

TIER 2

Social, Personality, and Culture Content Area

PSYC 420 The Self in Social Context (3 credits)
PSYC 423 Emotion (3 credits)
PSYC 424 Cultural Psychology (3 credits)
PSYC 425 Culture, Development, and the Self (3 credits)
PSYC 426 Psychometrics and Individual Differences (3 credits)
PSYC 427 Current Issues in Personality (3 credits)
PSYC 428 Social and Cultural Advanced Issues (3 credits)

Developmental Content Area

PSYC 431 Infancy (3 credits)
PSYC 432 Childhood Development (3 credits)
PSYC 433 Adolescent Development (3 credits)
PSYC 434 Aging (3 credits)
PSYC 435 Developmental Psychopathology (3 credits)
PSYC 438 Developmental Advanced Issues (3 credits)

Clinical and Health Content Area

PSYC 440	Psychopathology: Mood, Anxiety, and Personality Disorders (3 credits)
PSYC 441	Psychopathology: Schizophrenia and Neurocognitive Disorders (3 credits)
PSYC 442	Psychopathology: Behaviour Regulation Disorders (3 credits)
PSYC 443	Psychological Intervention Models (3 credits)
PSYC 444	Hypnosis and Dissociation (3 credits)
PSYC 445	Human Neuropsychology (3 credits)
PSYC 446	Stress (3 credits)
PSYC 447	Current Issues in Health Psychology (3 credits)
PSYC 448	Clinical Advanced Issues (3 credits)

Behavioural Neuroscience Content Area

PSYC 450	Neurobiology of Drug Abuse and Addiction (3 credits)
PSYC 451	Neurobiology of Learning and Memory (3 credits)
PSYC 452	Neurobiology of Sensation and Perception (3 credits)
PSYC 453	Neurobiology of Motivated Behaviour (3 credits)
PSYC 454	Hormones and Behaviour (3 credits)
PSYC 455	Neuropharmacology (3 credits)
PSYC 456	Functional Neuroanatomy (3 credits)
PSYC 457	Foundations of Animal Behaviour (3 credits)
PSYC 458	Behavioural Neuroscience Advanced Issues (3 credits)

Cognitive Science Content Area

PSYC 460	Vision (3 credits)
PSYC 461	Computational Modelling of Human Cognition (3 credits)
PSYC 462	Memory and Attention (3 credits)
PSYC 463	Concepts and Categories (3 credits)
PSYC 464	Judgment and Decision Making (3 credits)
PSYC 465	Language (3 credits)
PSYC 466	Cognitive Development (3 credits)
PSYC 467	Learning (3 credits)
PSYC 468	Cognitive Science Advanced Issues (3 credits)

ADVANCED EXPERIENCE COURSES

PSYC 387	Directed Research in Psychology (3 credits)
PSYC 483	Directed Readings in Psychology (3 credits)
PSYC 485	Specialization Project (6 credits)
PSYC 487	Advanced Directed Research in Psychology (3 credits)

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PSYC 200 *Introductory Psychology* (6 credits)

This comprehensive survey course introduces the student to a wide variety of topics in scientific psychology. Topics include the foundations of modern psychology, neural mechanisms, learning and memory, sensation and perception, motivation and emotion, cognitive processes, social influences, personality, disorders of cognition and behaviour, and therapy.

NOTE: Students who have received credit for or exemption from Introductory Psychology at Cegep or other post-secondary institutions may not take this course for credit.

NOTE: Students entering all Psychology programs except the minor who have not received credit for or exemption from Introductory Psychology at Cegep or other post-secondary institutions must take this course, but not for Psychology program credit.

NOTE: Students who have received credit for MANA 213 may not take this course for credit.

PSYC 210 *Critical Thinking in Psychology* (3 credits)

This course provides an innovative approach to understanding how psychologists think about the mind and behaviour, ask and answer questions, and collect and interpret evidence to clarify ideas and test hypotheses. Students learn the difference between critical thinking and gullibility. Students also develop skills to identify errors and misrepresentations in information presented in the media and in viewpoints driven by agendas rather than evidence.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 221 *Foundations of Personality* (3 credits)

The organization, functioning, and development of personality are discussed from the point of view of the major current theories. Evidence from empirical studies is introduced to illustrate various influences on personality. Socio-economic, cultural, and biological factors may also be considered.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 222 Person and Society (3 credits)

This course considers current personality and social psychology research as it relates to people's everyday lives. The focus is on blending these two research areas. The study of personality concerns itself with the psychology of the individual, individual differences, and the role of individual-level factors in explaining behaviour. In contrast, social psychology focuses on how behaviour may be influenced by social and contextual factors. Topics may include the many ways of describing the self and others, persuasion, group processes, close relationships, aggression, and prosocial behaviour.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 223 Motivation and Emotion in Daily Life (3 credits)

Why do individuals do the things they do? Why don't individuals do the things they don't do? When confronted with challenges, what determines whether individuals persist in the face of difficulty or decide to invest their energy elsewhere? This course presents models that address the question of why individuals do the things they do. These models are related to specific topics such as appetitive behaviour, love and sexual behaviour, arousal and attention, peak performance, aggression and anger, conflict, stress, curiosity, creativity, goal-setting, and achievement.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 230 Womb to Tomb: Psychological Transitions Across the Lifespan (3 credits)

This course studies the cognitive, socio-emotional, and physical changes and continuities that occur across the lifespan. Major theories of development are discussed and related to each of the life stages. Students also gain insight into the developmental processes that influence themselves and others.

NOTE: Students who have received credit for AHSC 220 may not take this course for credit.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 233 Adolescence (3 credits)

This course is an introduction to the study of adolescence. Topics are considered from cross-disciplinary and cross-cultural perspectives. Topics may include physical change, family relationships, friends and peers, sexual and sex-related behaviours, cognitive growth, and lifestyles.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 280 may not take this course for credit.

PSYC 235 When Good Kids Go Bad (3 credits)

This course examines the social, emotional, and behavioural problems encountered by children, youth, and parents. Manifestations of these issues range from day-to-day "normal" concerns to maladaptive and dangerous behaviours. Potential contributing biological, familial, peer, cultural, and economic factors are considered, as well as the uniquely different ways in which individuals react to what seem to be "similar" backgrounds.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 240 Foundations of Psychopathology (3 credits)

This course deals with major concepts and issues concerning psychopathology in humans. It considers current scientific models of diagnosis, etiology, assessment, and therapy. It reviews the major disorders of the DSM system, and explores social, learning, cognitive, biomedical, and psychodynamic approaches to major clinical disorders.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 241 Stress, Health, and Coping (3 credits)

Coping skills are directly related to health and to the amount of stress a person experiences. This course introduces students to research that explains how and why stress affects health. The ways in which coping skills and other recourses can effectively reduce stress are also considered. The course examines what psychologists know about stress in a research-oriented manner, giving equal attention to the physiological, psychological, and cognitive underpinnings of coping and health.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 242 Psychology and the Law (3 credits)

Psychology and the law interact in myriad ways. The criminal justice system, from its code to its enforcement, is based on implicit psychological assumptions about human behaviour and how it should be controlled. Those in the justice system make decisions based on evidence from observations and testimony, both of which are assumed to be gathered in an objective, unbiased manner. Those in psychological professions assume they can influence decisions made in the legal system by providing experimental evidence. This course examines the roles psychologists play in the legal system, the assumptions of both legal and psychological professional groups, and how these groups can complement one another.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 263 or for this topic under a PSYC 298 number may not take this course for credit.

PSYC 243 Learning Disabilities (3 credits)

This course deals with selected aspects of theory and practice related to learning disabilities including perceptual and motor disabilities, language disabilities, and methods of diagnosis and remediation. Issues of accurate assessment and differentiation from other forms of disability are also considered.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 281 may not take this course for credit.

PSYC 250 *Drugs and Behaviour* (3 credits)

This course examines various factors related to the use and abuse of licit and illicit drugs including alcohol and nicotine, depressants and stimulants, tranquilizers, opium derivatives, and hallucinogenic compounds. One of the main themes emphasized is why some people lose their ability to socially and physiologically regulate their intake. The course material focuses on the prevalent concepts in the field, theoretical models guiding researchers and clinicians, and approaches to intervention.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 261 or for this topic under a PSYC 298 number may not take this course for credit.

PSYC 251 *Learning and Memory in Daily Life* (3 credits)

This course examines current research on learning and memory and introduces students to a variety of topics in this area. Theories of learning and memory are related to examples from everyday life. Specific topics may include memory accuracy, techniques for improving study skills and school performance, animal training, sports training, strategies for memory improvement, strategies for changing bad habits, and child discipline.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 255 *Brain and Behaviour* (3 credits)

This course is an introduction to the biological bases of behaviour. The structural and functional anatomy of the central nervous system is presented, with particular emphasis on the neural pathways involved in behaviours relating to motivation, mood, learning and memory, and sensation and perception. This course explores how recent research helps in understanding how normal and abnormal brain functioning affect human behaviour.

NOTE: Students registered in a Psychology program may not take this course for credit.

PSYC 264 *Perception and Cognition in Daily Life* (3 credits)

This course introduces topics related to perception and cognition. The emphasis of the course is on how humans acquire, store, and use information in real-world contexts. Topics covered include reading, object perception, art and motion pictures, language processing, music, problem solving, and planning.

NOTE: Students registered in a Psychology program may not take this course for credit.

NOTE: Students who have received credit for PSYC 249 or for this topic under a PSYC 298 number may not take this course for credit.

SELECTED TOPICS IN PSYCHOLOGY

The 200-level Selected Topics courses (PSYC 297; PSYC 298; PSYC 299) are designed as elective courses for students who are not registered in a Psychology program. These courses cover a wide variety of areas of contemporary interest. The particular topic varies from one term to the next and the material is dealt with in a manner appropriate for students who have minimal formal background in psychology. Students should consult with the Psychology Department to find out the topic titles for a particular term.

NOTE: Students registered in a Psychology program may not take these courses for credit.

The Department also offers 300- and 400-level topics courses for students registered in Psychology programs. (See below.)

PSYC 297 *Selected Topics in Psychology* (3 credits)**PSYC 298 *Selected Topics in Psychology* (3 credits)****PSYC 299 *Selected Topics in Psychology* (6 credits)****PSYC 305 *History and Systems* (3 credits)**

Prerequisite: PSYC 200 or equivalent. This introductory course examines the historical background of psychology beginning with ancient Greece, the Middle Ages, and the Renaissance, through the William James era. Early contributions to psychology from the fields of philosophy, religion, physics, physiology, and psychophysics are presented and related to the various psychological schools of thought of the 19th century. Students gain an understanding of how cultural and social forces and various scientific paradigms shaped psychological theory and how psychological perspectives contribute to social life.

NOTE: Students who have received credit for PSYC 320 may not take this course for credit.

PSYC 310 *Research Methods and Designs I* (3 credits)

Prerequisite: PSYC 200 or equivalent; PSYC 315 previously or concurrently. This course describes the methods used by psychology researchers to obtain information and understand psychological phenomena and processes. Students learn how research studies are conceptualized and conducted, and how data are analyzed and interpreted within specific areas of psychology. Observational, experimental, and correlational techniques are presented in the context of ongoing research, to enable students to develop a conceptual understanding of the procedures used to develop and evaluate hypotheses and theories in psychology.

PSYC 311 *Research Methods and Designs II* (3 credits)

Prerequisite: PSYC 310, 315; PSYC 316 previously or concurrently. Advanced methodological issues in psychological research are introduced. Students gain experience in the critical evaluation of research design and methodology by conducting several experiments in different research areas, by analyzing and interpreting data from these experiments, and writing and presenting their research findings. This course is primarily intended for students who are preparing for graduate school. Lectures and laboratory.

PSYC 315 Statistical Analysis I (3 credits)

This course is an introduction to statistics that are used in the context of psychology research. Topics dealt with include frequency distributions, measures of central tendency and dispersion, the normal curve, correlation, linear regression, elementary probability theory, an introduction to hypothesis testing, and the t test. These topics are covered in lectures and in weekly laboratory sessions where students learn how to perform statistical tests both manually and with specialized software. *NOTE See §200.7*

NOTE: Students who have completed Cegep QM 360-300 (Quantitative Methods) and MATH 201-300 (Complementary Topics in Mathematics) with 75% or better grades can be exempt from PSYC 315. Exemptions may be granted on the basis of other courses. Application for exemption should be made to the Arts and Science Student Academic Services.

PSYC 316 Statistical Analysis II (3 credits)

Prerequisite: PSYC 310, 315. This course is an extension of PSYC 315. It is designed to advance students' understanding of hypothesis testing and statistical inferences. The course presents the general linear model, which subsumes multiple regression, analysis of variance (ANOVA), and analysis of covariance (ANCOVA). As well, the course deals in detail with the limits of null-hypothesis significance testing (NHST) and reviews alternatives to NHST including confidence intervals, measures of effect size, and meta-analysis. Lectures and weekly laboratory. *NOTE See §200.7*

PSYC 321 Fundamentals of Personality (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to theories of personality. The development, structure, and correlates of personality are presented from the viewpoint of major classical and current theories. Theories may include trait, biological, learning, and cognitive perspectives, as well as psychodynamic, humanistic, and existential perspectives. Through the examination of specific studies and the discussion of general methodological principles of personality research, emphasis is placed on the role of research in shaping and validating theories of personality.

NOTE: Students who have received credit for PSYC 326 may not take this course for credit.

PSYC 325 Fundamentals of Social Psychology (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to social psychology. It covers the scientific study of how people's thoughts, feelings, and behaviours are influenced by the presence of others. Topics discussed may include social and self perception; attitudes and attitude change; and conformity, group processes, interpersonal attraction, prosocial behaviour, aggression, and prejudice.

NOTE: Students who have received credit for PSYC 331 may not take this course for credit.

PSYC 333 Fundamentals of Lifespan Development (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to developmental psychology. It provides a broad survey of psychological research and theories about human development across the lifespan. It emphasizes the interaction of physical, cognitive, and socio-emotional domains in development from infancy to old age. Although the main focus of the course is on normative development, aspects of abnormal development may be covered. Specific methodological challenges and procedures relevant to developmental research are also discussed.

NOTE: Students who have received credit for PSYC 371 may not take this course for credit.

PSYC 340 Fundamentals of Psychopathology (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to psychopathology. The course deals with major concepts and issues in the study of psychopathology. It focuses on the major models of etiology, diagnosis, prognosis, assessment, and treatment, and presents the major disorders and five axes of the DSM system. Behavioural, cognitive, social learning, neurobiological, sociocultural, evolutionary, and psychodynamic approaches to psychopathology are covered, with an emphasis on research and methodology throughout.

NOTE: Students who have received credit for PSYC 322 may not take this course for credit.

PSYC 341 Fundamentals of Health Psychology (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to the multidisciplinary field of health psychology. Issues relating to health and illness across the lifespan, including health promotion and maintenance, prevention and treatment of illness, etiology and correlates of health, illness and dysfunction, and the health care system are covered from a biopsychosocial perspective. Topics such as social support, smoking, stress, cardiovascular disease, pain, and cancer are also presented.

NOTE: Students who have received credit for PSYC 392 may not take this course for credit.

PSYC 342 Forensic Psychology (3 credits)

Prerequisite: PSYC 340. This course critically examines research and theory relating to a number of selected issues of contemporary interest in forensic psychology. Topics such as the admissibility of scientific evidence, eye-witness testimony, trauma and memory, jury selection, clinical and actuarial profiling, psychopathy, serial offenders, the validity of psychiatric examinations and lie detectors, the insanity defence, and expert testimony are presented in light of recent Canadian and American legal decisions.

NOTE: Students who have received credit for PSYC 328 or for this topic under a PSYC 398 number may not take this course for credit.

PSYC 351 Fundamentals of Learning (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course is an introduction to theories and empirical findings concerning basic mechanisms of learning and memory in humans and non-human animals. Topics covered may include the study

of learning in historical perspective, Pavlovian conditioning, operant conditioning, reinforcement, stimulus control of behaviour, types of memory, self-control and observational learning, and behavioural paradigms used in contemporary research on learning and memory.

NOTE: Students who have received credit for PSYC 346 may not take this course for credit.

PSYC 354 *Evolutionary Foundations of Psychology* (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course examines the ways that evolutionary thought has influenced the study of behaviour. Fundamental evolutionary processes are introduced, and ideas about how those processes may have shaped human and animal behaviour are considered. Additional topics include biological and cognitive continuity among species, sources of individual differences in behavioural traits, evolutionarily stable strategies and states, methods of testing evolutionary hypotheses about behaviour, and the comparative method in psychology.

PSYC 355 *Fundamentals of Behavioural Neurobiology* (3 credits)

Prerequisite: BIOL 200, BIOL 201, BIOL 202, Cegep Biology 301, Cegep Biology 101-NYA, or Cegep Biology 921. This course provides an introduction to the neural mechanisms that underlie behaviour. Topics include the structure and function of neurons, neural communication, an introduction to neuroanatomy and endocrinology, and the processing of sensory information. Students also learn how complex systems, such as the sensory and motor systems, interact to produce behaviour.

NOTE: Students who have received credit for BIOL 383 or PSYC 358 may not take this course for credit.

PSYC 363 *Fundamentals of Sensation and Perception* (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course introduces the physiological and psychological mechanisms of sensation and perception. Thorough treatment is given to questions of how information about the world is acquired through visual and auditory systems, and other modalities, that together is used with stored information to create an ongoing mental representation of the world. Topics such as pitch perception, colour vision, perception of movement, size and space perception, illusions, and distance are covered.

NOTE: Students who have received credit for PSYC 349 may not take this course for credit.

PSYC 364 *Fundamentals of Cognition* (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course introduces cognitive psychology. Theoretical perspectives and experimental findings that inform the current understanding of how humans acquire, represent, and use knowledge are presented and discussed. Topics include attention, memory, categorization, language, and thinking. This course allows students to gain familiarity with topics and concepts necessary to pursue advanced studies in cognition.

NOTE: Students who have received credit for PSYC 352 may not take this course for credit.

PSYC 372 *Personnel Psychology* (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. This course focuses on the contributions of psychology to several human resource considerations in organizations. Topics include personnel selection, training methods, personnel appraisal, and career development. This is an applied area of psychology, and therefore the interplay between theory, research, and application is emphasized.

NOTE: Students who have received credit for PSYC 385 may not take this course for credit.

PSYC 374 *Organizational Psychology* (3 credits)

Prerequisite: PSYC 310; PSYC 315 previously or concurrently. Understanding psychology can help organizations reach their goals, retain their workforce, and make themselves attractive to future employees and investors. This applied psychology course focuses on research and theories relevant to the behaviour of managers and employees. Topics include the history of Industrial/Organizational(I/O) psychology; organizational development and communication; motivation, personality, and leadership; employee satisfaction and commitment; group behaviour; negotiation and conflict resolution; and job stress.

NOTE: Students who have received credit for PSYC 386 may not take this course for credit.

PSYC 387 *Directed Research in Psychology* (3 credits)

Prerequisite: PSYC 311, 316; permission of the Department. Under the supervision of a faculty member, typically from within the Department, the student carries out an independent research project and completes a written report. The area of study is decided upon through consultation with the faculty member.

NOTE: Students who have received credit for PSYC 439 may not take this course for credit.

SELECTED PROBLEMS IN PSYCHOLOGY

Selected Problems in Psychology is designed for students enrolled in a Psychology program. The material is dealt with in a manner that assumes a background in experimental psychology and, in some cases, specific preparation through prior completion of a related course. The minimal prerequisite is PSYC 310 (Research Methods and Designs I) and PSYC 315 (Statistical Analysis I). Students should consult the Psychology Department for details concerning available courses.

PSYC 398 *Selected Problems in Psychology* (3 credits)

PSYC 420 *The Self in Social Context* (3 credits)

Prerequisite: PSYC 325. This course addresses a wide range of theoretical and empirical approaches to the self in contemporary social psychology. Self-esteem and self-concept are addressed in terms of social context, personal and social norms, affective

experience, and interpersonal behaviour. Other topics covered may include narcissism, self-presentation, self-regulation, egocentrism, and limits to self-knowledge. Issues relating to gender, gender identity, and the development of gender roles and gender differences in the social context may also be discussed.

NOTE: Students who have received credit for PSYC 332 may not take this course for credit.

PSYC 423 *Emotion* (3 credits)

Prerequisite: PSYC 321 or 325. This course addresses models of emotion and individual differences in emotion and mood. The subject of how emotion influences attention, memory, evaluation, and behaviour in the social domain is also considered. In addition, particular attention is paid to a number of specific emotions.

NOTE: Students who have received credit for PSYC 334 may not take this course for credit.

PSYC 424 *Cultural Psychology* (3 credits)

Prerequisite: PSYC 321 or 325. This course introduces cultural and cross-cultural perspectives in psychology. It focuses on theoretical assumptions and research methods specific to these perspectives, and covers research on the ways in which culture both emerges from, and shapes basic psychological processes. Specific topics include evolution and culture; cultural differences in self-concept and value systems; acculturation, cultural contact, and adaptation; culture and cognition; and cultural variation in psychopathology, health, and therapy.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 425 *Culture, Development, and the Self* (3 credits)

Prerequisite: PSYC 325 or 333. This course examines cultural variations in developmental processes and outcomes, especially as they are related to the self-concept. Following a presentation of the basic concepts in the understanding of development and of culture, particular domains of development are examined according to how they vary across cultural contexts. Examples of domains include moral development, parent-child interaction, education, and suicide. The overarching goal is to describe human development as taking place within a cultural milieu, the consequences of this perspective for fundamental issues in psychology and the social sciences, and the implications for the challenges of pluralism, globalization, and public policy.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 426 *Psychometrics and Individual Differences* (3 credits)

Prerequisite: PSYC 310, 315. In this course, consideration is given to the general theory of psychological measurement and its application in the development and use of various psychometric instruments such as achievement, intelligence, aptitude, personality, and interest tests. Derived scores, norms, reliability, and validity of these instruments are discussed in the context of general measurement problems in psychology. Item analysis, signal-detection theory, diagnostics, and non-questionnaire methods may also be discussed.

NOTE: Students who have received credit for PSYC 318 may not take this course for credit.

PSYC 427 *Current Issues in Personality* (3 credits)

Prerequisite: PSYC 321. This course critically examines selected contemporary issues in personality psychology with a focus on recent research findings. The importance of personality in explaining behaviours, personal beliefs, developmental outcomes, and quality of life is considered.

NOTE: Students who have received credit for PSYC 327 may not take this course for credit.

PSYC 428 *Social and Cultural Advanced Issues* (3 credits)

Prerequisite: Permission of the Department. This course addresses the most recent advanced issues of contemporary interest in social and cultural psychology. The main topic of the course changes from one term to the next. Potential topics include social cognition, aggression and violence, experimental-existential psychology, social-cultural neuroscience, or culture and evolution. Students should consult with the Psychology Department for information on the central course topic for the current year.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 431 *Infancy* (3 credits)

Prerequisite: PSYC 333. This course provides a comprehensive account of psychological development in infancy. Aspects of infant development such as physical, perceptual, cognitive, verbal, emotional, and social development are covered. Theoretical perspectives and research methods specific to the study of infant development are emphasized.

NOTE: Students who have received credit for PSYC 373 may not take this course for credit.

PSYC 432 *Childhood Development* (3 credits)

Prerequisite: PSYC 333. This course provides an analysis of theories pertaining to the basic processes of development during early childhood and school-age periods. A broad range of theoretical positions and methodological strategies are presented. Emphasis is on physical, cognitive, emotional, social, and personality development and the origins of individual differences in adjustment and well-being. Particular attention is given to cultural variability in development and to developmental differences between girls and boys.

NOTE: Students who have received credit for PSYC 375 may not take this course for credit.

PSYC 433 *Adolescent Development* (3 credits)

Prerequisite: PSYC 333. This course provides an overview of theory and research relating to multiple domains of development during adolescence. Topics include hormonal processes, physical and cognitive development, peer and parent-adolescent

relations, family processes, gender roles, identity formation, sexuality, delinquency, drug abuse, suicide, and psychological disorders in adolescents. When possible, topics are considered from cross-cultural and historical perspectives.

NOTE: Students who have received credit for PSYC 379 may not take this course for credit.

PSYC 434 *Aging* (3 credits)

Prerequisite: PSYC 333. This course covers recent developments in the psychology of aging. Topics include age-related changes in physiology, biology, and in sensory and cognitive functioning. Particular attention is given to the effects of these age-related changes on behaviour, personality, interpersonal functioning, gender roles, coping, and adjustment. Methodological considerations in aging research are also discussed.

NOTE: Students who have received credit for PSYC 380 may not take this course for credit.

PSYC 435 *Developmental Psychopathology* (3 credits)

Prerequisite: PSYC 333 or 340. Using principles of developmental and clinical psychology, this survey course focuses primarily on understanding the pathways to abnormal adjustment in childhood and adolescence. The origins of deviant and competent behaviour are examined, with special attention to the multiplicity of possible risk factors and causal processes, assessment of problems and diagnoses, and the efficacy of interventions. Students are also introduced to a number of behavioural problems such as attention-deficit and hyperactivity disorder; aggression, externalizing problems, and disruptive behaviour disorders; internalizing problems, anxiety, and mood disorders; learning disabilities; mental retardation; and autism.

NOTE: Students who have received credit for PSYC 377 may not take this course for credit.

PSYC 438 *Developmental Advanced Issues* (3 credits)

Prerequisite: Permission of the Department. This course addresses the most recent advanced issues of contemporary interest in developmental psychology. The main topic of the course changes from one term to the next. Potential topics include social, cognitive, language, or personality development. Students should consult with the Psychology Department for information on the central course topic for the current year.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 440 *Psychopathology: Mood, Anxiety, and Personality Disorders* (3 credits)

Prerequisite: PSYC 340. This course presents a focused and thorough investigation of mood and anxiety disorders. Problems studied include depressive, bipolar, and anxiety disorders. Relevant somatoform (e.g. hypochondriasis) and personality (e.g. avoidant, dependent) disorders may also be discussed. Topics include contemporary theory, classification issues, and ongoing controversies, with an emphasis on current research.

NOTE: Students who have received credit for PSYC 323 may not take this course for credit.

PSYC 441 *Psychopathology: Schizophrenia and Neurocognitive Disorders* (3 credits)

Prerequisite: PSYC 340. This course presents a focused and thorough investigation of schizophrenia and the neurocognitive disorders. Problems studied include schizophrenia and related psychotic disorders (e.g. delusional disorder, schizoaffective disorder), as well as dementia and other disorders of aging. Relevant personality (e.g. paranoid, schizotypal) disorders may also be discussed. Topics include contemporary theory, classification issues, and ongoing controversies, with an emphasis on current research.

NOTE: Students who have received credit for PSYC 324 may not take this course for credit.

PSYC 442 *Psychopathology: Behaviour Regulation Disorders* (3 credits)

Prerequisite: PSYC 340. This course presents a focused and thorough investigation of psychopathology resulting from disorders of behaviour regulation. Problems studied include eating, substance use, and impulse-control disorders. Relevant sexual, gambling, and personality (e.g. borderline, antisocial) disorders may also be discussed. Topics include contemporary theory, classification issues, and current controversies, with an emphasis on current research.

PSYC 443 *Psychological Intervention Models* (3 credits)

Prerequisite: PSYC 340. This course presents a focused and thorough investigation of major approaches to psychological intervention. It focuses on general principles of therapy, research methods for the study of process and outcome, and the contrasts between various theories and modalities. Topics include cognitive behavioural therapy, psychodynamic psychotherapy, humanistic-existential therapy, couples and family therapy, group therapy, and motivational interviewing. Professional and ethical issues pertaining to clinical psychologists and clinical psychology research may also be discussed.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 444 *Hypnosis and Dissociation* (3 credits)

Prerequisite: PSYC 340. This course critically examines research, theory, and methodological approaches relating to a number of selected issues of contemporary interest in the area of hypnosis and dissociative phenomena. Experimental and applied research on selected topics such as recovered memory, dissociation, pain and psychosomatic disorders, social and cognitive correlates of hypnotic responses, and the issue of coercion is reviewed. The forensic and clinical uses and abuses of hypnosis are surveyed and contrasted to experimental findings.

NOTE: Students who have received credit for PSYC 330 or for this topic under a PSYC 398 number may not take this course for credit.

PSYC 445 *Human Neuropsychology* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course is a general introduction to human neuropsychology. Topics discussed include principles of brain organizations and function, human neuroimaging and recording techniques, the contribution of clinical patients

and single case studies, selected neurological disorders, and cognitive neuroscience. Emphasis is on how these issues can be meaningfully related to human behaviour, emotion, sensory perception, and higher cognitive processes.

NOTE: Students who have received credit for PSYC 359 may not take this course for credit.

PSYC 446 *Stress* (3 credits)

Prerequisite: PSYC 355; PSYC 340 or 341. This course examines how the evolutionary and adaptive stress response has come to contribute to health and pathology in modern society. The major endocrine, neurobiological, and cognitive underpinnings of the stress response are covered, and current stress research is discussed. Topics include the role of stress in aging, memory, depression, drug abuse, post-traumatic stress disorder, and the consequences of exposure to stress and adversity.

PSYC 447 *Current Issues in Health Psychology* (3 credits)

Prerequisite: PSYC 341. This course offers a focused treatment of selected advanced topics in health psychology. Potential topics include psychosocial and environmental antecedents of disease, adaptation to medical illness, approaches to improve health and manage disease, pediatric psychology, and mechanisms by which psychosocial and environmental characteristics get inside the body to influence health.

NOTE: Students who have received credit for PSYC 393 may not take this course for credit.

PSYC 448 *Clinical Advanced Issues* (3 credits)

Prerequisite: Permission of the Department. This course addresses the most recent advanced issues of contemporary interest in clinical psychology. The main topic of the course changes from one term to the next. Potential topics include neurobiology of psychopathology, functional somatic syndromes, personality and psychopathology, psychotherapy process research, or epidemiology of psychological disorders. Students should consult with the Psychology Department for information on the central course topic for the current year.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 450 *Neurobiology of Drug Abuse and Addiction* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course focuses on the behavioural and neuronal mechanisms involved in drug abuse and addiction. It provides students with a solid conceptual foundation of how drugs of abuse affect the brain and behaviour. Topics such as the pharmacology of drugs of abuse, drug-induced neuronal plasticity in brain regions related to motivation and reward, and the interaction between biological factors and environmental events in addiction are discussed.

NOTE: Students who have received credit for PSYC 361 may not take this course for credit.

PSYC 451 *Neurobiology of Learning and Memory* (3 credits)

Prerequisite: PSYC 351, 355. This course deals with some of the major questions about the neural bases of learning and memory. A number of mechanisms subserving learning and memory are investigated, including models based on relatively simple nervous systems (e.g. conditioning in Aplysia), as well as more complex systems (e.g. the neuronal mechanisms mediating eyeblink conditioning in the rabbit and the neuronal pathways that mediate reinforcement). Other topics may include the anatomical bases of memory, including the role of the hippocampus in spatial memory, and the role of the NMDA receptor in learning and memory.

NOTE: Students who have received credit for PSYC 362 may not take this course for credit.

PSYC 452 *Neurobiology of Sensation and Perception* (3 credits)

Prerequisite: PSYC 355, 363. This course examines the relationship between the structures of the sensory systems and perception. Topics include how the structure of the eye and ear determine how and what is seen and heard, the modularity of cortical organization, segregation and integration of visual information, PDP and other models, bottom-up and top-down processing, and the reconstruction of the perceptual world.

NOTE: Students who have received credit for PSYC 365 may not take this course for credit.

PSYC 453 *Neurobiology of Motivated Behaviour* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course examines the neural mechanisms that mediate motivated behaviour, and provides an introduction to concepts such as goal-directed behaviour and incentive motivation. Other topics include pleasure and pain; ingestive behaviour; sexual and reproductive behaviour; aggression; temperature regulation; and sleep, arousal, and biological rhythms.

NOTE: Students who have received credit for PSYC 367 may not take this course for credit.

PSYC 454 *Hormones and Behaviour* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course deals with the role of hormones in integrating the activity of various neural, endocrine, and sensory systems to bring about organized, purposeful behaviour. Topics include reproductive, sexual, or environmentally adaptive systems. Treatment of material ranges from the molecular to the behavioural level.

NOTE: Students who have received credit for PSYC 369 may not take this course for credit.

PSYC 455 *Neuropharmacology* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course focuses on neurochemistry and neuropharmacology relating to synaptic transmission. The chemistry and pharmacology of each major class of neurotransmitters is discussed. The pharmacological and psychological bases of drug actions are also explored, to provide an understanding of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, as they relate to issues such as CNS disease, affective disorders, and the treatment of pain. This course is primarily intended for students wishing to pursue advanced graduate work in neuroscience or clinical psychology, or for those who are seeking to enter the health professions.

PSYC 456 *Functional Neuroanatomy* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course focuses on the structural and functional anatomy of brain systems underlying important cognitive functions such as motor behaviour, sensory perception, learning, and memory. Emphasis is on how comparative anatomy and different experimental techniques contribute to the understanding of brain function. Through discussion of the results of anatomical, physiological, and neuroimaging studies, students develop an in-depth knowledge of the structure and function of the human brain.

PSYC 457 *Foundations of Animal Behaviour* (3 credits)

Prerequisite: PSYC 310, 315, 355. This course explores the bases underlying the study of animal behaviour as they relate to the study of psychobiology and evolutionary psychology. Topics may include reproductive strategies, communication, the effects of early experience, learning and cognition, and the mechanisms of orientation navigation and homing in animals. Behaviour genetics, theory of evolution, basic ethological concepts, and methodological issues are also discussed.

NOTE: Students who have received credit for PSYC 396 may not take this course for credit.

PSYC 458 *Behavioural Neuroscience Advanced Issues* (3 credits)

Prerequisite: Permission of the Department. This course addresses the most recent advanced issues of contemporary interest in behavioural neuroscience. The main topic of the course changes from one term to the next. Potential topics include examination of the current state of scientific study of motivation or a focused look at memory consolidation. Students should consult with the Psychology Department for information on the central course topic for the current year.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 460 *Vision* (3 credits)

Prerequisite: PSYC 363. This course builds on the introduction to the visual system developed in PSYC 363. Topics are examined from the psychophysical, computational, and physiological perspectives and may include advanced treatment of colour, motion, and texture perception; spatial vision; object, face, and scene recognition; eye movement control; flow fields; attention; and perception-in-action.

PSYC 461 *Computational Modelling of Human Cognition* (3 credits)

Prerequisite: PSYC 363 or 364. This course reviews the history of the view of mind as machine and the various computational metaphors that have helped in understanding the particular kind of computational device the brain is. The course explores the ways in which computational models of mind are implemented and can be tested against psychological theories and data. Students learn how to construct simplified representations of reality based on rule-based processes to recreate aspects of human cognition.

PSYC 462 *Memory and Attention* (3 credits)

Prerequisite: PSYC 364. This course provides an advanced introduction to theories and empirical research on memory and attention. Topics include various memory systems and mechanisms, including long- and short-term memory, working, episodic, and semantic memory. The course also addresses research on attentional processes such as switching, selective, and divided attention.

PSYC 463 *Concepts and Categories* (3 credits)

Prerequisite: PSYC 364. This course provides an advanced introduction to theories of conceptual representation and processes of categorization. It reviews the empirical research in these fields, including studies with normal and impaired populations.

PSYC 464 *Judgment and Decision Making* (3 credits)

Prerequisite: PSYC 364. This course is an introduction to the cognitive and affective processes involved in evaluating options and choosing between them. Major theories and empirical studies are reviewed from an interdisciplinary perspective that includes both cognitive science and neuroscience and that draws on research carried out on humans and on other animals.

PSYC 465 *Language* (3 credits)

Prerequisite: PSYC 364. This course covers the cognitive, developmental, and social aspects of language and human communication. Topics may include linguistic theory, language acquisition, language comprehension and production, the biological bases of language, reading, speech perception, and second-language development.

NOTE: Students who have received credit for PSYC 395 may not take this course for credit.

PSYC 466 *Cognitive Development* (3 credits)

Prerequisite: PSYC 333 or 364. This course provides an advanced introduction to the development of children's thinking, from infancy through the elementary-school years. The goal of the course is to familiarize students with recent theory and research on the cognitive development in children. Topics include the development of language, perception, concept, social cognition, and memory.

PSYC 467 *Learning* (3 credits)

Prerequisite: PSYC 351. This course is a continuation of PSYC 351; it presents a more focused and thorough treatment of more advanced topics in learning. These may include developmental aspects of learning, animal memory and cognition, human applications of conditioning principles, biological constraints on learning, and the physiology of learning and memory. Different sections of the course may cover different sets of topics.

NOTE: Students who have received credit for PSYC 347 may not take this course for credit.

PSYC 468 Cognitive Science Advanced Issues (3 credits)

Prerequisite: Permission of the Department. This course addresses the most recent advanced issues of contemporary interest in cognitive science. The main topic of the course changes from one term to the next. Possible topics include memory, attention, concept formation, category representation, decision-making, reasoning, language, intelligence, creativity, skill acquisition, cognitive and language development, or the neural bases of cognitive functioning. Students should consult with the Psychology Department for information on the central course topic for the current year.

NOTE: Students who have received credit for this topic under a PSYC 398 number may not take this course for credit.

PSYC 483 Directed Readings in Psychology (3 credits)

Prerequisite: PSYC 311, 316; permission of the Department. This course is designed for the advanced student wishing to do independent, individually supervised literature research on a specific topic in psychology. This research culminates in a written report. Students should have a well-defined topic and a faculty supervisor, typically selected from within the Psychology Department, before registering for this course.

NOTE: Students who have received credit for PSYC 436 may not take this course for credit.

PSYC 485 Specialization Project (6 credits)

Prerequisite: PSYC 311, 316; permission of the Department. This seminar provides students with experience in the design, conduct, analysis, and reporting of independent research in the major areas of psychology. The research is undertaken under the supervision of a faculty member.

NOTE: Students who have received credit for PSYC 400 may not take this course for credit.

PSYC 487 Advanced Directed Research in Psychology (3 credits)

Prerequisite: PSYC 485 or 495; permission of the Department. This course is for students who have completed a specialization project or honours thesis and wish to conduct an additional research project. Under the supervision of a faculty member, typically from within the Department, the student carries out an independent research project and completes a written report. The area of study is decided upon through consultation with the faculty member.

PSYC 490 Honours Seminar Topics (3 credits)

Prerequisite: PSYC 311, 316; permission of the Department. The aim of this seminar is to provide a forum for the discussion of topics relating to current knowledge, theory, and methods in psychology, and to help students achieve a critical understanding of psychology. Topics may include learning, interpersonal relations, human development, perception, cognition, subjective well-being, or language. Emphasis is on current theory as it relates to selected topics within psychology.

NOTE: Students who have received credit for PSYC 421 may not take this course for credit.

PSYC 491 Honours Seminar Issues (3 credits)

Prerequisite: PSYC 311, 316; permission of the Department. The aim of this seminar is to provide a forum for the discussion of issues relating to current knowledge, theory, and methods in psychology, and to help students achieve a critical understanding of psychology. Issues may include social and developmental processes, motivation, emotion, or the biological bases of behaviour. Selected issues from these areas are discussed from theoretical perspectives specific to given phenomena.

NOTE: Students who have received credit for PSYC 422 may not take this course for credit.

PSYC 495 Honours Thesis (6 credits)

Prerequisite: PSYC 311, 316. Open to final-year honours students with permission of the Department. This course requires the student to propose and conduct a study, and submit a thesis written according to the APA format. Students are also required to give an oral presentation in class on their proposal and on their final thesis. The work is supervised by a faculty member selected by the student, typically from within the Psychology Department.

NOTE: Students who have received credit for PSYC 430 may not take this course for credit.

31.270

RELIGION

Faculty

Chair

LORENZO DITOMMASO, PhD McM., Associate Professor

Distinguished Professors Emeriti

FREDERICK BIRD, PhD Calif. (Berkeley)

MICHEL DESPLAND, ThD Harv.

JACK LIGHTSTONE, PhD Brown

SHEILA McDONOUGH, PhD McG.

Professors

RICHARD FOLTZ, PhD Harv.

MICHAEL OPPENHEIM, PhD Calif. (Santa Barbara)

Hindu Studies Chair

T.B.A.

Associate Professors

DONALD BOISVERT, PhD Ott.

LYNDA CLARKE, PhD McG.

NAFTALI COHN, PhD Penn.

CARLY DANIEL-HUGHES, ThD Harv.

MARC DES JARDINS, PhD McG.

SHAMAN HATLEY, PhD Penn.

NORMA JOSEPH, PhD C'dia.

LESLIE ORR, PhD McG.

NORMAN RAVVIN, PhD Tor.

Assistant Professor

HILLARY KAEEL, PhD Harv.

Quebec and Canadian Jewish Studies Chair

IRA ROBINSON, PhD Harv., Professor

Senior Lecturer

MARC LALONDE, PhD C'dia.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex FA, Room: 101

514-848-2424, ext. 2065

religion.concordia.ca

Department Objectives

The Department of Religion is dedicated to the academic study of various faiths and of social and cultural phenomena affected by religions. The curriculum includes the comparative study of many religious traditions of the world. At both the undergraduate and graduate levels, students are encouraged to develop an understanding of at least two religious traditions. Whatever the student's special focus, the informed appreciation of the beliefs and values of other cultures is considered an essential dimension of education for today's world.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

The Department of Religion requires a statement of intent with the application for honours programs.

60 BA Honours in Religion

- 12 In a language related to thesis; or in a related discipline such as Anthropology, Classics, English Literature, History, Philosophy, Sociology, Women's Studies
- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 21 From area of primary concentration*
- 6 From area of secondary concentration*
- 6 RELI elective credits at the 300 or 400 level
- 3 RELI 409³
- 6 RELI 410⁶

*See areas of concentration.

42 BA Major in Religion

- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 21 From area of primary concentration*
- 6 From area of secondary concentration*
- 6 RELI elective credits at the 300 or 400 level
- 3 RELI 409³

*See areas of concentration.

24 Minor in Religion

- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 18 RELI elective credits (chosen in consultation with the departmental advisor)

60 BA Honours in Judaic Studies

- 12 Chosen from: HEBR 210⁶, 241³, 242³; RELI 401³
Students who demonstrate fluency in Hebrew by a written examination may substitute RELI courses at the 300 and 400 level approved by the departmental advisor.
- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 3 RELI 220³
- 9 Chosen from RELI 301³, 326³, 327³, 328³
- 9 Chosen from RELI 329³, 336³, 338³, 339³, 381³, 391³, 392³, 395³, 407³
- 6 Chosen from RELI 223³, 224³, 225³, 226³, 302³, 316³, 318³, 319³, 320³, 321³, 322³, 323³, 324³, 325³ or other appropriate courses approved by the departmental advisor
- 3 Chosen from RELI 332³, 334³, 335³ or other appropriate courses approved by the departmental advisor
- 3 RELI elective credits at the 300 or 400 level
- 3 RELI 409³
- 6 RELI 410⁶

48 BA Major in Judaic Studies

- 12 Chosen from HEBR 210⁶, 241³, 242³; RELI 401³
Students who demonstrate fluency in Hebrew by a written examination may substitute RELI courses at the 300 and 400 level approved by the departmental advisor.
- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 3 RELI 220³
- 9 Chosen from RELI 301³, 326³, 327³, 328³
- 9 Chosen from RELI 329³, 332³, 334³, 335³, 336³, 338³, 339³, 381³, 391³, 392³, 395³, 407³ or other appropriate courses approved by the departmental advisor
- 6 Chosen from RELI 223³, 224³, 225³, 226³, 302³, 316³, 318³, 319³, 320³, 321³, 322³, 323³, 324³, 325³ or other appropriate courses approved by the departmental advisor
- 3 RELI 409³

24 Minor in Judaic Studies

- 6 Chosen from RELI 209³, 210³, 214³, 215³
- 3 RELI 220³
- 6 Chosen from RELI 301³, 326³, 327³, 328³
- 9 RELI elective credits at the 300 or 400 level chosen in consultation with the departmental advisor

42 BA Major in Southern Asia Studies

6 Required in first year: HIST 261³, RELI 215³

6 Chosen from HIST 364³, 393³, 462³ and/or any Special Topics course(s) on Southern Asia in the same Department

9 Chosen from RELI 224³, 225³, 226³, 318³, 340³, 341³, 346³, 347³, 348³, 350³, 384³

3 Chosen from POLI 336³ and/or any Special Topics course(s) on Southern Asia in the same Department

NOTE: Any of the above courses may be substituted by a Special Topics course on Southern Asia in the same Department and approved by the departmental advisor.

18 Chosen from any relevant courses in the core disciplines, including Special Topics courses (not already counted towards the above requirements) or courses dealing with Southern Asia in the departments of Economics, Education, English, Geography, Planning and Environment, Sociology/Anthropology, the Faculty of Fine Arts, and the John Molson School of Business

24 Minor in Southern Asia Studies

6 Required: HIST 261³; RELI 215³

6 Chosen from ECON 311³, 319³; HIST 364³, 393³, 462³; POLI 336³

6 Chosen from RELI 224³, 225³, 226³, 318³, 340³, 341³, 346³, 347³, 348³, 350³, 384³; FMST 335³

NOTE: Any of the above courses may be substituted by an appropriate course on Southern Asia approved by the departmental advisor.

6 Elective credits from any courses dealing primarily with Southern Asia, and Special Topics courses in any discipline with a Southern Asia theme or focus

24 Minor in Iranian Studies

3 RELI 318³

3 Chosen from ANTH 322³ or ANTH courses dealing with the peoples and cultures of Iran or Persia and approved by the departmental advisor

3 Chosen from CLAS 230³ or HIST 219³; HIST 242³, 369³, 467³; POLI 391³, 395³

3 Chosen from RELI 224³, 316³, 317³, 319³, 383³, 411³

6 Chosen from RELI 313³, 412³, 414³ or RELI courses dealing with the religions of Iran or Persia and approved by the departmental advisor

6 Chosen from any courses dealing primarily with Iran or the Eurasian regions historically influenced by Iranian and Persian culture and approved by the departmental advisor

NOTE: Any of the above courses may be substituted by an appropriate course approved by the departmental advisor.

Areas of Concentration**A. Asian Religions (21 credits)**

21 Chosen from RELI 224³, 225³, 226³, 316³, 318³, 319³, 340³, 341³, 346³, 347³, 348³, 350³, 360³, 361³, 364³, 383³, 384³, 385³, 411³ or other appropriate courses approved by the departmental advisor

B. Christianity (21 credits)

3 RELI 223³

12 Chosen from RELI 301³, 302³, 320³, 321³, 322³ or other appropriate courses approved by the departmental advisor

6 Christianity elective credits at the 300 or 400 level

C. Judaism (21 credits)

6 RELI 220³, 301³

6 Chosen from RELI 326³, 327³, 328³ or other appropriate courses approved by the departmental advisor

9 Judaic Studies elective credits at the 300 or 400 level

D. Women and Religion (21 credits)

3 RELI 233³

6 Chosen from RELI 381³, 382³, 383³, 384³, 385³, 391³, 392³ or other appropriate courses approved by the departmental advisor

9 Chosen from RELI 372³, 380³, 387³, 389³, 406³ or other appropriate courses approved by the departmental advisor

3 Women and Religion elective credits at the 300 or 400 level

E. Islam (21 credits)

6 Chosen from RELI 224³, 316³, 319³

12 Chosen from RELI 314³, 315³, 317³, 318³, 348³, 383³, 412³; from 316³ or 319³ if not taken to satisfy requirements in first category; from 411³ or 416³ if not taken to satisfy requirements in third category; or other appropriate courses approved by the departmental advisor

3 Chosen from RELI 411³ or 416³; or other appropriate courses approved by the departmental advisor

NOTE: Majors in Religion concentrating in Islam may count up to six credits of Arabic toward the Islam concentration. Honours students concentrating in Islam must take at least nine credits of Arabic, to be counted in the 12-credit "language related to thesis" category of the honours program. Honours students may also count an additional six credits of Arabic toward their program.

NOTE: Students who demonstrate fluency in Arabic by a written examination may substitute RELI courses at the 300 and 400 level approved by the departmental advisor.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

RELI 209 *The Religious Imagination* (3 credits)

This course explores the conceptual elements that underlie the religious experience. These elements include the notion of the sacred, beliefs, cosmologies and myths, the origins and understanding of evil, ethics and salvation.

NOTE: Students who have received credit for RELI 211 may not take this course for credit.

RELI 210 *Religion in Practice* (3 credits)

This course focuses on the day-to-day practice of religious traditions. Included are the expression of religious experiences through art, music, and scripture; transmission of these religious expressions through ritual, worship and mystical/ecstatic practices; and the construction and maintenance of different types of religious authority and communal identities.

NOTE: Students who have received credit for RELI 211 may not take this course for credit.

RELI 214 *Religions of the West* (3 credits)

This course surveys the history, doctrines, institutions, and practices of religions that arose in Western Asia, including Judaism, Christianity, and Islam. The course examines contemporary forms of religious life in those parts of the world where these traditions have spread, as well as indigenous religions. The course explores the religious activities and experiences of both women and men within these various traditions.

NOTE: Students who have received credit for RELI 213 or RELI 214 may not take this course for credit.

RELI 215 *Religions of Asia* (3 credits)

This course surveys the history, doctrines, institutions, and practices of religions that have arisen in and spread throughout Asia, including Hinduism, Buddhism, and the religions of China and Japan. The course explores the religious activities and experiences of both women and men within these traditions.

NOTE: Students who have received credit for RELI 213 or RELI 215 may not take this course for credit.

RELI 216 *Encountering Religions* (3 credits)

This course serves as an introduction to some of the religions of today's world, and explores several contemporary contexts where people of diverse religious backgrounds come into contact with one another.

NOTE: Students who have received credit for RELI 216 or for this topic under a RELI 298 number may not take this course for credit.

RELI 218 *Wisdom, Traditions, and Enlightenment* (3 credits)

Most of the world's religions have formulated a set of teachings which convey an idea of the fundamental realities of the nature of the universe, and of the path by which humankind can come to a realization of these realities. Such a realization is frequently equated with the ultimate goal of enlightenment as liberation, or knowledge of/union with the transcendent. This course explores several of the religious traditions which have developed texts and practices leading to wisdom.

NOTE: Students who have received credit for RELI 218 or for this topic under a RELI 298 or RELI 299 number may not take this course for credit.

RELI 220 *Introduction to Judaism* (3 credits)

This course examines the continuities and changes in Jewish society, institutions, concepts, and traditions from ancient times to the present. It also provides an introduction to Jewish practice and belief in its contemporary diversity, including a survey of the rituals, symbols, and ceremonies of Jews today.

NOTE: Students who have received credit for RELI 222 may not take this course for credit.

RELI 223 *Introduction to Christianity* (3 credits)

This course provides an introduction to key developments and enduring structures in the historical evolution of Christianity. It examines the variety of expressions of faith that are embodied by the Eastern churches (e.g. Greek and Russian Orthodox, Syrian) and the Western (e.g. Roman Catholic, Protestant), and traces the ways in which institutions, symbols, and rituals have in the past and continue today to carry forward the Christian tradition as a world religion in a variety of cultural contexts.

RELI 224 *Introduction to Islam* (3 credits)

This course explores the religious tradition of Islam through the beliefs and practices of the vast number of Muslims scattered throughout the world — in the Middle East, Indonesia, India and Pakistan, North America, and other places. It examines the scriptures and common rituals or "pillars" of the religion, as well as expressions of life and culture in the past and present such as the law (shariah), the Islamic arts, and the mystical orders.

RELI 225 *Introduction to Hinduism* (3 credits)

This course surveys Hinduism in its diverse history, sects, schools of thought, sacred texts, spiritual practices, and contemporary interpretations. Students focus on several prominent dimensions of the tradition, including the Hindu temple, mysticism and metaphysics in the Upanishads, karma and rebirth, dharma (religious duty and the cosmic/social order), moksha (liberation), gender and caste, devotional traditions, and narrative literatures.

RELI 226 Introduction to Buddhism (3 credits)

This course introduces students to the diversity of forms of Buddhism that have emerged in history and are practised today. It examines those aspects that are shared in common by Buddhists all over the world, including reverence for the Buddha, support of the monastic order, and adherence to the Buddha's teachings. The course explores the ways in which these ideals and beliefs are expressed through such Buddhist practices as worship, study, pilgrimage, and meditation.

NOTE: Students who have received credit for RELI 350 or 364 may not take this course for credit.

RELI 233 Introduction to Women and Religion (3 credits)

This introduction to the particular problems and issues in the study of women and religion uses case studies from various religious traditions. The course presents a survey of the different levels of participation, the complex ritual activities, and the intriguing divine imagery associated with women that are found in many religious traditions. Questions pertaining to the contemporary feminist discourse on such topics as witchcraft, patriarchy, and goddess religions are also explored.

RELI 298 Selected Topics in Religion (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 300 Cults and New Religious Movements in North America (3 credits)

This course takes a sociological and historical approach towards understanding new religious movements (NRMs), popularly known as "cults." The course examines the reasons for their controversial status in society, and undertakes a survey of the beliefs, rituals, leadership, membership, recruitment strategies, and social organization of a number of specific NRMs.

NOTE: Students who have received credit for RELI 217 or for this topic under a RELI 298 number may not take this course for credit.

RELI 301 Biblical Studies I: The Hebrew Bible (3 credits)

An introduction to the methods and results of biblical scholarship with regard to the history, culture, and religion of ancient Israel. Particular attention is given to the major religious affirmations and theological concepts of the Hebrew Bible that have become central in the subsequent development of Judaism.

RELI 302 Biblical Studies II: Christian Origins (3 credits)

A critical survey of Christian origins, this course focuses on New Testament literature and considers historical setting, history of text, religious and cultural significance. Attention is paid to extra-canonical literature and other relevant sources.

RELI 307 Christian Mystics (3 credits)

Based on the study of significant texts, this course offers a historical and sociological exploration of the range of mystical and ecstatic experiences within the Christian tradition. Special consideration is given to the role which gender plays in understanding these experiences.

RELI 310 Self and Other: Identity and Ethical Development (3 credits)

This course considers ethical issues arising in the context of personal and interpersonal relations, families and friendships, and health and medical care. These issues are discussed in relation to traditional and contemporary moral perspectives, both religious and non-religious. Topics covered may vary from year to year, but may include discussions of conscience and career, privacy, sexual relations, harassment, substance abuse, abortion, euthanasia, and gay and lesbian relations.

NOTE: Students who have received credit for RELZ 310 may not take this course for credit.

RELI 312 Justice and Social Conflict in a Globalized World (3 credits)

This course considers ethical issues arising in the context of social, legal, and political relations. These issues are discussed in relation to both traditional and contemporary moral perspectives, both religious and non-religious. Topics covered typically include discussions of social and economic inequality, welfare, poverty, just punishment, business ethics, public ethics, economic development, and sustainable development.

NOTE: Students who have received credit for RELI 332 or RELZ 312 may not take this course for credit.

RELI 313 Zoroastrianism (3 credits)

Zoroastrianism, though counting no more than a few hundred thousand practitioners today, is one of the most significant traditions in the history of religions, providing a world-view and ethical framework later adopted by Judaism, Christianity, and Islam. This course covers the 3,000-year history of Zoroastrianism, including controversies surrounding its origins, its contributions to other religions, its eventual decline, and the Zoroastrian diaspora of contemporary times. Readings from the Avesta and other texts are in English translation.

RELI 314 Muslim Cultures of North America (3 credits)

This course traces the appearance and growth of Muslim presence in the United States and Canada, from the first immigrant communities in the late-19th century to the present, and the more recent trend of conversion among North Americans. Issues facing Muslim communities such as integration, discrimination, and education are investigated, as well as the emergence of distinctively North American forms of Islamic thought and lifestyle.

NOTE: Students who have received credit for this topic under a RELI 498 number may not take this course for credit.

RELI 315 Muslim Cultures in Southern Asia (3 credits)

About one-third of the world's Muslims live in India, Pakistan, or Bangladesh, making Southern Asia the world region with the largest proportion of Muslims. Yet many aspects of Muslim belief and practice in these countries have a distinctively South Asian

flavour and in some cases derive from regional cultural traditions. This course looks at the history of Muslim presence in Southern Asia, including its extensive political and cultural impact from the seventh century to the present, and investigates the complexities of communal identity over the course of that history. The role of Sufism and Muslim contributions to South Asian literature, art, architecture, and music are also explored.

RELI 316 *Classical Islam* (3 credits)

The course explores the various aspects of Muslim civilization from its initial spread from Arabia to Spain, sub-Saharan Africa, India, and China, up to the age of the Ottoman, Safavid, and Mughal empires in the 16th and 17th centuries. Special attention is given to the emergence of schools of law, theology, philosophy, and mystical orders, as well as the literature, arts, and architecture of diverse Muslim societies.

RELI 317 *Sufism* (3 credits)

The course explores the emergence and development of Islamic mysticism beginning with pious individuals in the eighth century and coalescing into institutional forms by the 10th. Attention is given to the teachings of key mystical figures, the Sufi orders, and the social role of Sufism. Sufi poetry, music, and other forms of devotion and practice are studied in the contexts of diverse Muslim societies over the past 1,000 years up to the present.

NOTE: Students who have received credit for this topic under a RELI 379 number may not take this course for credit.

RELI 318 *Shiite Islam* (3 credits)

This course explores the history and ideas of Shiism, from the inception of the movement to the present. The various sects are introduced and treated, including the Twelvers, Ismailis, Zaydis, Druze, and Alawites. Basic Shiite doctrines such as crypto-religion (*taqiyyah*), esoterism, messianism, quietism, and syncretism are considered in comparison with other religions. Study of the modern period treats subjects such as theocracy, political activism, and martyrdom. The course examines the centres of Shiite population: Southern Asia, Iran, Iraq and the Gulf, Lebanon, and North America.

RELI 319 *Modern Islam* (3 credits)

This course surveys some of the main questions raised by modernity for Muslims and the various types of responses to it that Muslims have sought to formulate and put into practice, particularly in terms of how knowledge is defined, how society is governed, and how men and women are to relate to each other and to non-Muslims.

RELI 320 *Catacombs, Crusades and Convents: History of Christianity I* (3 credits)

This first course of the sequence on Christianity, historically considered, examines the life and thought of Christians as a minority in the Graeco-Roman world and their transition to a position of power. The course studies the rise of monasticism after the collapse of the Roman Empire, the construction of medieval Christianity and its flowering with the founding of the Friars amid the great theological syntheses of the 13th century. Saint Augustine, Saint Francis and Aquinas are the key figures studied.

NOTE: Students who have received credit for RELI 303 may not take this course for credit.

RELI 321 *Mystics, Heretics and Reformers: History of Christianity II* (3 credits)

This second course of the sequence on Christianity, historically considered, focuses on the period from 1300 to 1650 and examines the many groupings for alternatives to the hierarchical synthesis proposed by great minds and leading authorities. It concludes with a study of the new orthodoxies established by Protestant reformers (Luther and Calvin) and by the Council of Trent in the 16th century.

NOTE: Students who have received credit for RELI 304 may not take this course for credit.

RELI 322 *From Toleration to Political and Social Activism: History of Christianity III* (3 credits)

This third course of the sequence on Christianity, historically considered, examines the rise of the doctrine of toleration and its progressive implementation by modern nation states. Attention is focused on the transformations that this imposed on Christian belonging and Christian thinking. The course looks at the evolution of the churches from the mid-17th century up to the contemporary period, with particular attention to attitudes toward women, education of children, poverty, slavery and missions.

NOTE: Students who have received credit for RELI 306 may not take this course for credit.

RELI 323 *Honouring the Gods and Feasting with Friends: The Ancient Mediterranean* (3 credits)

This course explores various dimensions of social and religious life among Greeks, Romans, and others in the ancient Mediterranean. With the help of both archaeological and literary sources, the course examines the concrete ways in which ordinary women and men maintained fitting relations with their gods, with their rulers, and with one another, illuminating the religious and cultural contexts in which early Judaism and Christianity emerged.

RELI 324 *On the Margins of Christianity: Heresy, Dissidence and the End of the World* (3 credits)

This course investigates marginal forms of Christianity which have found themselves ignored, excluded, or suppressed by more mainstream Christian groups and institutions. The course explores aspects of the history of heretical movements, mysticism, and apocalypticism. It looks at the world-views and practices associated with such marginal forms of Christianity, placing religious traditions and movements within their broader social, cultural, and political contexts.

NOTE: Students who have received credit for RELI 308 may not take this course for credit.

RELI 325 *Leaders, Rebels and Saints* (3 credits)

This course, which varies in focus from year to year, investigates the lives of controversial or influential women and men in the history of different religious traditions. Going beyond mere biography, the course situates particular figures within their social and

cultural contexts, while dealing with how such prominent figures were viewed, portrayed, and used by others. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for RELI 308 may not take this course for credit.

RELI 326 *Ancient Judaism* (3 credits)

This course examines the variety of Judaic expression in the period of Late Antiquity. This includes the concepts, institutions, and literature of both rabbinic and non-rabbinic Judaism as well as their biblical background. The development of rabbinic systems of thought and law, as well as their expression in rabbinic literature, are considered.

RELI 327 *Medieval Jewish Thought and Institutions* (3 credits)

This course examines the intellectual, religious, and social history of selected Jewish communities during the Middle Ages. Both internal Jewish developments and changing Jewish relations with their non-Jewish neighbours are considered.

RELI 328 *Modern Judaism* (3 credits)

This course surveys the major historical events, sociological and political forces, and intellectual currents which shaped Judaism in the modern period as well as the ways that Jewish communities responded to these forces. Among the topics explored are Emancipation, forms of religious adjustment, anti-semitism, the experience of Jewish communities in Russia and North America, the Holocaust, and Zionism and the state of Israel.

RELI 329 *Israel: Religion and State* (3 credits)

This course studies the emergence and development of the state of Israel, from the beginnings of the Zionist movement to the present time. It also explores the major political, social, and intellectual developments in both the pre- and post-state periods. The role of Judaism within the changing state is a primary focus.

RELI 330 *Montreal Jewish Community* (3 credits)

Exploring the Montreal Jewish community's uniqueness in terms of its ethnic, denominational, political, linguistic and cultural composition, this course examines some of the institutions, along with the buildings, programs, groups and individuals that are located in "Jewish" Montreal. The course focuses on the Jewish community's historical, institutional and social connections to both Montreal society as a whole and other Jewish communities.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 331 *Literature and the Holocaust* (3 credits)

Religious, historical, literary, and political contexts have been applied to come to terms with the events of the Holocaust. All of these are relevant as students read important and provocative novels dealing with such issues as ethics, the relationship between art and history, the use of humour and popular cultural forms, as well as the way that storytelling helps direct our understanding of events that are often said to be incomprehensible. The wider impact of fiction dealing with the Holocaust on the popular media, including film, CD-ROMs, video, and news reporting, is also considered.

NOTE: Student who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 332 *Canadian Jewish Literature* (3 credits)

This course explores the Jewish voice in Canadian literature which can be seen to be the first opening toward a multicultural tradition in this country. Writers such as A.M. Klein, Mordecai Richler, Henry Kreisel, and Leonard Cohen created an English-language tradition of Jewish writing that is varied, provocative, and lively. Students look at novels, short stories, some poetry, memoir, and criticism. Students also consider non-Jewish authors, such as Gwethalyn Graham and Mavis Gallant, who were among the first to write about Jewish characters for an English-speaking Canadian audience. This course allows students to consider issues related to Canadian identity and culture, ethnic studies, and multiculturalism alongside literary questions.

NOTE: Students who have received credit for this topic under a RELI 335 number may not take this course for credit.

RELI 334 *Introduction to Canadian Jewish Studies* (3 credits)

This course introduces the history of the Canadian Jewish community and the themes, personalities, and media which have contributed to Canadian Jewish culture and life. Students explore historical texts, novels, films, and museums in order to gain a sense of the particularity of Jewish culture in Canada and its place in the Canadian multicultural ethic. The relationship of Canadian Jewry to communities in the United States, Europe, and Israel, and to its own past, is also examined.

RELI 335 *Jewish Cultures of Canada* (3 credits)

This course offers students a detailed view by way of history, local culture, creative life, and religious activity of the various centres of Jewish culture in Canada. Instructors make use of a variety of materials to supplement course texts, for example: films, visiting speakers, local tours, and archival resources.

RELI 336 *Sephardic Judaism* (3 credits)

This course studies the social and spiritual life of the various communities within the Sephardi world. Topics include Judaism under Islam; the expulsion and dispersion; Sephardi-Maghrebi Judaism; modern times in Arab lands; Sephardi life in the new world, Europe, and Israel. In addition, the philosophical, Halakhic, biblical, and mystical works of Sephardi Jews are examined.

RELI 338 *Holocaust: Historical Circumstances* (3 credits)

This course examines the historical circumstances that made possible the systematic destruction of European Jewry in the years 1939-45, as well as the process of destruction and the Jewish and world responses to that destruction.

NOTE: Students who have received credit for RELI 357 may not take this course for credit.

RELI 339 *The Impact of the Holocaust on Religious Thought* (3 credits)

This course examines the ramifications of the Holocaust in Jewish and Christian thought. Issues discussed include the problem of evil; suffering; the election of Israel; God's relation to the course of human events.

NOTE: Students who have received credit for RELI 358 may not take this course for credit.

RELI 340 *The Veda, Upanishads, and Religion in Ancient India* (3 credits)

This introduction to the religious concepts, practices, and wisdom of ancient India is based on the literature of the Vedic period, including the Upanishads. The course examines the contribution of various aspects of the Vedic tradition to the development of Hinduism, and explores the interaction among religions in the ancient period.

RELI 341 *Hindu Sadhana: From Yajna to Yoga* (3 credits)

Hinduism has evolved many paths to come in touch with the divine. It presents a philosophy of transformation of the individual through various practices, so that there dawns a realization of transcendent reality. This course examines some of the sadhanas — such as sacrifice, reasoning and wisdom, and yogic samadhi — which developed in the classical period of Hinduism.

RELI 343 *Yoga in History, Thought, and Practice* (3 credits)

This course examines the history, thought, and practices of Yoga in their religious and cultural contexts. In the modern West, Yoga has become popular as a secular form of exercise. However, as this course shows, the diverse Yoga traditions of India have also involved sophisticated analyses of the mind and systems of meditation. Intrinsic to no single religion, Yoga has had roles in most South Asian traditions, including Hinduism, Buddhism, Jainism, and Sufism or Islamic mysticism. The course surveys this rich history, and the various forms of meditative and physical discipline Yoga has entailed.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 344 *Hindu Myth and Narrative: the Epics and Puranas* (3 credits)

This course approaches Hinduism through its narrative literature, especially the great epics (the *Mahabharata* and *Ramayana*) and mythological texts (*Puranas* — the “Ancient Books”). Through stories of gods, devotees, villains, and heroes, the course explores the development of significant themes in the Hindu tradition, from ethics and philosophy to asceticism and devotion. An important focus of the course is the enduring cultural significance of myth and the epics, as retold through the ages in a variety of languages, cultural contexts, and media, including classical and vernacular texts, the oral tradition, drama, dance, and cinema.

RELI 346 *Gandhi, Colonialism, and Beyond* (3 credits)

This course concerns Hindu traditions in the modern world, beginning with the period of colonial British rule in South Asia. Students examine the writings and historical contexts of influential Hindu reformers, intellectuals, and activists, including Ram Mohun Roy, Dayananda Sarasvati, Swamy Vivekananda, the Tagores, V.D. Savarkar, and especially Mahatma Gandhi. Issues of focus include the history of the modern idea of Hinduism, responses to European thought and institutions (including Christianity), Hindu understandings of modernity, social change and reform, religious nationalism, contemporary gurus and their transnational movements, and Hinduism in the diaspora.

NOTE: Students who have received credit for RELI 351 may not take this course for credit.

RELI 347 *Religion and the Arts in South and Southeast Asia* (3 credits)

This course is an introduction to the religious art of South and Southeast Asia, including an examination of Hindu, Buddhist, and Islamic architecture, sculpture, painting, and performing arts. The course examines the ways in which sacred art is related to myth and symbol, religious values and goals, ritual, religious experience, and social and political realities.

RELI 348 *Religion and Society in South and Southeast Asia* (3 credits)

This historical and sociological examination of religion's impact on and intersection with the structures of South and Southeast Asian society, explores such issues as caste and class, gender and family relations, links between religion and the state, and relations between Hindu, Buddhist, and Muslim communities.

RELI 350 *Theravada Buddhism* (3 credits)

This course examines the early history, doctrine, institutions, and practices of Buddhism in India, and follows the development of Theravada Buddhism in the countries of Southeast Asia up to the present day.

NOTE: Students who have received credit for RELI 314 may not take this course for credit.

RELI 352 *Topics in Diaspora Studies* (3 credits)

This course treats topics related to the diaspora of religious communities. Topics covered change from year to year, and may include an examination of the history and dynamics of diaspora of a particular community (e.g. the Jewish diaspora, the Hindu diaspora), or the comparative investigation of a particular theme in diaspora studies. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for RELI 346 may not take this course for credit.

RELI 353 *Religion and the Arts in the West* (3 credits)

This course explores the way in which the fine arts, literary arts, and performing arts have given expression to, and shaped the experience of, religious realities in the history of the West, and also considers the ways in which, in a more recent and contemporary context, art may be seen as engaging with aspects of divinity and spirituality.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 354 Religion and Film (3 credits)

This course examines films that deal with religious themes — explicitly or implicitly — and provides an opportunity to analyze the language of film as a form of narrative through which cultural and religious ideas are transmitted.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 355 Religion and Violence (3 credits)

This course explores how religion may be seen to engender or exacerbate violence, as well as the ways that religion may critique, prevent or even offer alternatives to violence. Sacred writings, theologies, rituals and communal actions of particular communities are studied, as well as notions of the self, the group, others, outsiders and enemies. In particular, the life-work and writings of such key figures as Mahatma Gandhi and Martin Luther King are studied in order to provide some religious perspectives on the relationship between non-violence and the resistance to injustice.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 360 Religions of China (3 credits)

This course concentrates on the historical development of Chinese religions from the earliest periods of Chinese civilization to contemporary times. It investigates the relationships among the classical religious traditions as portrayed through scriptures, commentaries, and rituals. Focus is placed on the unfolding of the five great religious currents of China: the classical imperial cults, Daoism, Confucianism, Buddhism, and popular cults.

NOTE: Students who have received credit for RELI 349 may not take this course for credit.

RELI 361 Religions of Japan (3 credits)

This course uses a historical approach to understand the development of Japanese religious traditions. It investigates popular Japanese cults and religions, the assimilation of foreign religious thought and practices, and the implantation of Buddhism, Confucianism, and other models from China. Religious sectarianism, state-regulated religious schools, cults, and the role of religion in the establishment of Japanese national identity are also studied.

NOTE: Students who have received credit for RELI 349 may not take this course for credit.

RELI 362 Religions of Tibet (3 credits)

The goal of this course is to familiarize students with current issues in Tibetan studies and to enhance understanding of Tibetan religion in Tibet, China and the rest of the world. It examines the “nameless” popular religions of Tibet, including mountain cults, shamanism, spirit possession and a variety of manifestations of popular religion. Students become familiar with the main schools of Tibetan Buddhism and the Bon religion, their history, dogma, lineages, philosophical enquiries, ritual and ascetic practices.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 363 Jainism (3 credits)

This course provides an introduction to the religious culture of the Jain community. The early history of the Jain tradition in India is explored through a consideration of the life stories of the great teachers of the tradition, of the classical systems of Jain philosophy, cosmology and ethics, and of the rich traditions of Jain narrative literature and art. Contemporary Jainism, including the religious practices of monks, nuns, laymen, and laywomen, and the contemporary relevance of Jainism’s central precept of universal non-violence (ahimsa) are also studied.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 364 Mahayana Buddhism (3 credits)

This course studies the origins and evolution of the Mahayana Buddhist in India, and the spread and growth of various Mahayana traditions in East Asia. It examines developments in texts, doctrine, philosophy, ethical ideals, practices (worship and meditation), and institutions.

RELI 365 Religion and Literature (3 credits)

This course provides an opportunity to study a selection of literary works (such as novels and poems) with a focus on the religious issues raised by their content and their form. The course explores the relations between current trends in literary criticism and the interpretation of religious language, with its use of symbol, metaphor, parable, and myth.

RELI 367 Ritual, Ceremony and Celebration (3 credits)

Ritual is one of the essential components of religious practice. This course explores the place and function of ritual in a variety of religious traditions, both historical and contemporary. It looks at theoretical understandings of religious ritual, and examines such rituals as sacrifice, rites of passage, worship and ascetic and meditative practices in their theological, social, and cultural contexts.

RELI 368 Religion in Native Traditions (3 credits)

This overview looks at the many diverse religious traditions of the First Nations populations in North America. The course examines the sacred stories, ceremonial patterns, life cycle rituals, and religious activities in their varied expressions. Consideration is given to the historical interaction of native government with religious practices.

RELI 369 Religion and Alternative Medicine (3 credits)

This course explores popular forms of alternative medicine and religious healing rituals. It examines the historical and cultural relationships between religious belief, spiritual practices, and types of healing outside the discourses of conventional medical practice. Some of the major issues addressed include miracles and the miraculous, the efficacy of prayer and meditation, gender and alternative modes of healing, and the role of parallel forms of medical knowledge and practice in religious communities.

NOTE: Students who have received credit for this topic under a RELI 298 number may not take this course for credit.

RELI 370 *Topics in Comparative Religion* (3 credits)

This course treats various topics in comparative perspective, examining religious themes as they are represented in two or more religious traditions. Topics covered change from year to year, and may include comparative religious law, comparative ritual, comparative philosophy, or comparative ethics. Specific topics for this course will be stated in the Undergraduate Class Schedule.
NOTE: Students who have received credit for RELI 309 or 369 may not take this course for credit.

RELI 371 *Religion and Healing* (3 credits)

This course looks at the interactions between religious beliefs and practices and healing beliefs and practices, both in traditional and contemporary settings. Topics typically include examinations of shamanism, folk medicine, spiritual healing, complementary and alternative medicine, and the relations between faith and established medical practices. Topics are discussed in relation to various religious traditions.

RELI 372 *The Human Body in Religious Thought and Practice* (3 credits)

This study of religious attitudes to the human body focuses on the body as a foundation for religious symbolism, religious community and identity, ritual, and religious experience. The course examines these problems with reference to various religious traditions. Issues examined include purification of the body; eating; mortification and mutilation of the body; attitudes towards dead bodies and physical immortality; attitudes towards bodies as gendered; embodied spirituality and incarnation.

RELI 373 *Introduction to Mysticism* (3 credits)

This course examines the concepts of mysticism articulated by contemporary scholarship. It then looks at mystical texts and experiences from a variety of religious traditions both comparatively and with respect to their position within the dynamic of their own traditions.

RELI 374 *Religion and Science* (3 credits)

How has religion viewed science, and how has science viewed religion? This course explores the relationship between religion and science both within particular religio-cultural contexts and in comparative perspective. The contexts considered may include those belonging to Christian, Jewish, Muslim, Hindu, or other Asian worldviews. Points of conflict and contact between scientific and religious discourses are also explored.

NOTE: Students who have received credit for RELZ 374 may not take this course for credit.

RELI 375 *Religions of Canada* (3 credits)

This course examines the role religions have played in the development of Canada as well as their influence in Canadian society, politics, and culture. Attention is paid as well to the interaction of different religious groups in the Canadian context.

NOTE: Students who have received credit for RELI 363 may not take this course for credit.

RELI 376 *Psychology of Religion* (3 credits)

This survey looks at various perspectives and methods used in psychology as they are relevant to understanding the role and value of religion for the individual. The course examines the ideas of such figures as William James, Freud, and Jung, among others, and considers such topics as intense religious experience, conversion, images of God, myth and symbol, ritual, and religious and moral development.

RELI 377 *Topics in Religious Interaction* (3 credits)

This course treats topics relating to contacts between and interactions among different religious traditions. Topics covered change from year to year, and may include an examination of religions in contact within a particular historical or contemporary setting, or the comparative investigation of a particular theme, such as syncretism, dialogue, religious war, or religious encounter in the context of colonialism. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for RELI 367 may not take this course for credit.

RELI 378 *Death and Dying* (3 credits)

This course provides a comparative perspective on the variety of conceptions and practices related to death and dying that are found in different world religions. In addition, the course considers how people in contemporary North American society utilize traditional religious concepts and rituals, scientific understandings and medical procedures, or innovative combinations of ideas and practices with which to cope.

RELI 380 *Sexuality in the History of Religions* (3 credits)

This course examines, from a comparative and historical perspective, the interplay between religion and sexuality. It looks at the development of attitudes towards sexuality within diverse religious traditions, and religious manifestations of sexuality. Topics include, among others: human reproduction, gender roles and identity, birth control, abortion, celibacy, sexual variance, and homosexuality.

RELI 381 *Women and Religion: Judaism* (3 credits)

This course explores the status and religious roles of women within the Judaic tradition. Its focus is on the practice of the religion, especially the ritual and legal spheres. The relationship between common practice, popular attitudes, and formal legal principles is examined in order to inquire into issues of gender and religion.

RELI 382 *Women and Religion: Christianity* (3 credits)

The focus of the course is the role of women and the conflicting patterns of gender construction in the history of Christianity. Through a critical use of primary and secondary sources, both visual and textual, the course explores the sources of women's power and subordination in order to illuminate the relationship between gender and the Christian tradition.

RELI 383 *Women and Religion: Islam* (3 credits)

This course explores past and present debates among Muslims about the ideal status of women in Islam. The historical and legal background — the material of the debate — is examined first. The class then considers how a variety of discourses, ranging from conservative to Muslim-feminist, treat and manipulate this material.

RELI 384 *Women and Religion: Hinduism* (3 credits)

This course examines the roles and activities of Hindu women. Issues to be considered include the construction in history of models for the “Hindu woman” and the ways in which such models have shaped Hindu women’s lives and experience, the religious activities of Hindu women, the contemporary concerns. The relation between abstract Hindu conceptions of “the feminine” — as a force to be revered, regulated, or repressed — and the actual circumstances and activities of Hindu women, both in the present and in the past, is discussed.

RELI 385 *Women and Religion: Buddhism* (3 credits)

This course explores the situation, activities, and experiences of women within Buddhism. Using an historical approach, the course examines the circumstances of women in early Buddhism, and traces subsequent developments in India, Tibet, Southeast Asia, the Far East, and the West, up to the present day.

RELI 386 *Witchcraft, Magic and Religion* (3 credits)

This course approaches the study of magic, witchcraft, and religion from a variety of perspectives. Taking examples from indigenous cultures, the ancient world, medieval Europe, the early modern period and contemporary movements, the practices and rituals that have been labelled magic or witchcraft are examined, along with the responses to them. The course explores how magicians and witches view themselves, how different cultures relate to them, and how magic, witchcraft, and religion merge and diverge.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 387 *Goddesses and Religious Images of Women* (3 credits)

This comparative survey of female divinity and feminine imagery studies various religious traditions. Among the issues to be explored are the imaging of goddesses as mothers; the conception of forces like fertility, energy, materiality, and knowledge as feminine; the correspondences and relations between goddesses and women; and the contemporary feminist recovery of the Goddess.

RELI 389 *Women's Ritual: Expressions and Expertise* (3 credits)

This comparative examination of the contexts and patterns of women’s ritual lives looks at various religious traditions. In addition to considering women’s activities in formal or public ritual contexts, this course focuses especially on the importance of women as ritual specialists and authorities in the context of the home.

RELI 391 *Women in Jewish History: Ancient and Medieval* (3 credits)

This course examines the lives and experiences of Jewish women from the late antique period through and including the medieval. Using primary and secondary materials, the class inquires into the varieties of women’s encounter with history. The differences between communal standards and individual exploits are highlighted, as are geographic distinctions. Through a critical reading of Jewish sources and historians’ accounts, questions of methodology and theory are addressed.

RELI 392 *Women in Jewish History: Modern* (3 credits)

This course examines the lives and experiences of Jewish women in the modern period. The immigrations to North America and the subsequent development of the community provide the framework for investigating Jewish women’s encounter with and contribution to modern Jewish life. The main focus is on North America, using primary sources such as fiction, biography, and autobiography. The influence of denominational differences and feminist challenges complete the survey.

RELI 394 *History of Satan: Evil Personified in Judaism and Christianity* (3 credits)

This course investigates the origins, development, and significance of personified evil, that is Satan and his demons, in early Judaism and in the history of Christianity. Consideration is given to some of the most important literary and visual depictions of this figure and his story from the ancient world through the Middle Ages to present day. The course sheds light on how intellectuals thought of this figure and also how Satan came to play an important role in popular culture down through the centuries.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 395 *Studies in Jewish Thought and Philosophy* (3 credits)

By means of the analysis of particular issues, thinkers, and texts, this course explores the character of Jewish philosophy. Issues in Jewish philosophy that may be examined include the relationship between faith and reason, the understanding of God, Judaism and the inter-human, the powers and limits of philosophical understanding.

RELI 396 *Food and Religion* (3 credits)

This course examines food cultures and food rituals and explores religious meanings and the making of religious identities. The preparing and sharing of food defines religious community and expresses religious values. In looking at food in several world religions, this course focuses on how food can serve as a medium of transmission and transaction, and on the roles that women and men, gods and ancestors, and other beings and forces have in this network.

NOTE: Students who have received credit for this topic under a RELI 398 number may not take this course for credit.

RELI 397 *Kabbalah and Jewish Mysticism* (3 credits)

This survey of kabbala, the Jewish mystical tradition, places emphasis on the study of representative Jewish mystical texts and socio-historical context for the developing mystical traditions. It includes the development of the messianic idea, Merkava mysticism, Hasidei Ashkenaz, Kabbalah, Sabbatianism, and Hasidism. The current popularity of Kabbalah is also addressed. *NOTE: Students who have received credit for this topic under a RELI 379 number may not take this course for credit.*

RELI 398 *Selected Topics in Religion* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

RELI 401 *Studies in Hebrew Texts* (3 credits)

Prerequisite: HEBR 210, 241, 242; or permission of the Department. A reading of representative selections of classical and modern Hebrew texts. Attention is paid to the historical and philosophical background of the texts.

RELI 403 *Questions and Controversies in Christianity* (3 credits)

Prerequisite: Six credits in 300-level Christian Studies courses or permission of the Department. This course, which varies in focus from year to year, explores themes that have been of critical significance and the focus of contest and debate within the history of Christianity. This course situates such conflicts and discussions among Christian groups, individuals, institutions, and traditions within broader social, political, and cultural contexts. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for RELI 362 may not take this course for credit.

RELI 406 *Feminist Hermeneutics and Scripture* (3 credits)

This feminist critical reading of sacred texts focuses on the rediscovery of women in holy scriptures. This course is for the advanced student able to work with primary sources. Different texts may be considered such as Hebrew Bible, New Testament, Koran, Hindu and Buddhist scriptures.

RELI 407 *Topics in Judaic Studies* (3 credits)

This course deals with advanced topics in Judaic Studies. Topics covered change from year to year, and may include Jewish law, Jewish ritual, and Jewish mysticism. Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for RELI 394 or 397 not take this course for credit.

RELI 409 *Methodology and the Study of Religion* (3 credits)

Prerequisite: Permission of the Department. This course examines the various methodological approaches that inform the comparative study of religion. Questions investigated pertain to the collection and interpretation of evidence, the types of resources available and techniques used, the complex differences between men's and women's religious experiences and expressions, as well as the impact of significant theoretical approaches on the analysis of religion.

RELI 410 *Honours Thesis* (6 credits)

Prerequisite: Honours standing in Religion or Judaic Studies. The student works with an individual faculty member in a particular field of religious or Judaic studies. Students are asked to produce a sustained piece of written work to be read by their advisor and at least one other member of the Department.

NOTE: Students who have received credit for RELI 499 may not take this course for credit.

RELI 411 *Studies in Qur'an and Hadith* (3 credits)

Prerequisite: Any two Religion courses in Islam or permission of the Department. Selected readings from the Qur'an and Hadith serve as a basis for examination of issues such as historical background, text formation, and function of the scriptures within the tradition, including the Law. Classical and modern exegeses of selected passages are also considered. Knowledge of Arabic is not necessary, but the original texts will be made available to students with knowledge of the language.

RELI 412 *Religions of Iran* (3 credits)

Iran is one of the major birthplaces of world religions, including Zoroastrianism, Manichaeism, and the Baha'i faith, as well as numerous minor sects. Iranian culture has also played a major role in informing and transforming Judaism, Christianity, Buddhism, and Islam. This course covers the long history of Iranian civilization in terms of the religious life of Iranians and the many other peoples who have been affected and influenced by Iranian society from the Mediterranean world to South and East Asia.

NOTE: Students who have received credit for this topic under a RELI 498 number may not take this course for credit.

RELI 413 *Classical Persian Literature* (3 credits)

Readings of selected poetry and prose from the rise of classical Persian until the 19th century allow students to explore the language, thought, and culture of Iranian civilization. Tutorial for advanced students; knowledge of Persian required.

RELI 414 *Rumi and the Masnavi* (3 credits)

Students explore Islamic mysticism through the 13th-century masterpiece of Persian mystical lore, the *Masnavi* of Jalal al-Din Rumi. Perspectives from Sufism, Islamic doctrine, and comparative mysticism are applied in selected readings. Although the course is given in translation, native speakers of Persian are invited to read the original texts.

RELI 416 *Studies in Muslim Civilizations* (3 credits)

The Muslim world is composed of many diverse cultures, each with its own distinct history, patterns of society, and religious expressions. The course compares and contrasts the cultures of different Muslim civilizations through their literature, art, religious institutions, and encounters with the modern world.

RELI 496 *Independent Studies in Religion* (3 credits)

Prerequisite: Permission of the Department. The student works with an individual faculty member in a particular field of religious or Judaic studies, as a reading course.

NOTE: Students who have received credit for RELI 495 may not take this course for credit.

RELI 498 *Advanced Topics in Religion* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Faculty*Chair*

GREG M. NIELSEN, PhD *Montr.*, Professor

Sociology*Professors*

VALÉRIE DE COURVILLE NICOL, PhD *Car.*

DANIELLE GAUVREAU, PhD *Montr.*

FRANCES M. SHAVER, PhD *Montr.*

ANTHONY J. SYNNOTT, PhD *Lond.*

Associate Professors

MEIR AMOR, PhD *Tor.*

BEVERLEY BEST, PhD *S.Fraser*

DANIEL DAGENAIS, PhD *Paris*

SATOSHI IKEDA, PhD *Mich.*, PhD *S.U.N.Y.(Binghamton)*

SYLVIA KAIROUZ, PhD *Montr.*

KATJA NEVES-GRAÇA, PhD *York (Can.)*

SHELLEY Z. REUTER, PhD *Qu.*

BART SIMON, PhD *Calif.(San Diego)*

JEAN-PHILIPPE WARREN, PhD *Montr.*

Assistant Professors

MARC LAFRANCE, PhD *Oxf.*

AMY SWIFFEN, PhD *Alta.*

Senior Lecturers

AARON BRAUER, MA *C'dia.*

HUSSEIN MERHI, PhD *Montr.*

Anthropology*Professors*

VERED AMIT, PhD *Manc.*

SALLY COLE, PhD *Tor.*

HOMA HOODFAR, PhD *Kent*

J. DAVID HOWES, PhD *Montr.*

CHRISTINE JOURDAN, PhD *A.N.U.*

Associate Professor

MAXIMILIAN C. FORTE, PhD *Adel.*

Assistant Professors

KREGG HETHERINGTON, PhD *Calif.(Davis)*

MARK WATSON, PhD *Alta.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: H 1125-44

514-848-2424, ext. 2140

Department Objectives

Sociology and Anthropology examine the processes of social and cultural life in diverse human societies, past and present. These core disciplines of the social sciences are closely linked to the humanities, since various aspects of culture and society concern them all.

The celebration of diversity — cultural, ethnic, and racial — among the students and faculty as well as in the subject matter, is a hallmark of the Department. It offers a full range of undergraduate programs, including joint programs in both disciplines.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the departmental honours advisor normally following the completion of 30 credits.

60 BA Honours in Sociology

- 3 SOCI 203^{3*}
- 6 SOCI 212^{3**}, 213³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 3 SOCI 310³
- 6 SOCI 402³, 403³
- 6 SOCI 409⁶
- 6 Chosen from SOCI 410⁶, 415⁶
- 21 SOCI elective credits (maximum of six credits at the 200 level)

60 BA Specialization in Sociology

- 3 SOCI 203^{3*}
- 6 SOCI 212^{3**}, 213³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 3 SOCI 310³
- 6 SOCI 402³, 403³
- 6 Chosen from SOCI 410⁶, 415⁶
- 21 SOCI elective credits (maximum of six credits from the 200 level)
- 6 400-level SOCI credits

60 BA Joint Specialization in Anthropology and Sociology

See Anthropology

42 BA Major in Sociology

- 3 SOCI 203^{3*}
- 6 SOCI 212^{3**}, 213³
- 3 200-level ANTH credits
- 6 SOCI 300⁶
- 3 SOCI 310³
- 18 SOCI elective credits (maximum of six credits from the 200 level)
- 3 400-level SOCI credits

30 Minor in Sociology

- 3 SOCI 203^{3*}
- 6 200-level SOCI credits
- 6 SOCI 300⁶
- 6 SOCI elective credits
- 9 300-level SOCI credits

**Students exempted from SOCI 203³ are required to take three credits from SOCI 200- and 300-level courses.*

***Students exempted from SOCI 212³ are required to take three credits from SOCI 200- and 300-level courses.*

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are open to students who have successfully completed SOCI 203 or equivalent, plus at least three credits of 200-level Sociology courses. Students in related disciplines who wish to take cognate courses in Sociology may apply to the Sociology undergraduate advisor for waiver of prerequisites on the basis of equivalent background.
- (2) 400-level courses are open to students who have successfully completed at least six credits from 300-level SOCI courses.
- (3) Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. Once students have taken a crosslisted course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

SOCI 203 Introduction to Society (3 credits)

An introduction to the sociological study of society. The course begins with a consideration of the concepts, models, and methods used by sociologists. This is followed by an examination of selected substantive areas of social life, ranging from the relations between individuals and groups to total societies.

NOTE: Students who have received credit for SOCZ 203 may not take this course for credit.

SOCI 204 Sociological Imagination (3 credits)

Students are introduced to sociological imagination through theoretical, methodological, and empirical examples. They are taught the nature and logic of theory construction, the place of theory in social inquiry, conceptual tools for research, sociological problem construction, various methods of investigation, and styles for the presentation of theoretical or empirical results.

SOCI 212 Statistics I (3 credits)

Priority to enrol in this course is given to students who are in a Sociology or Anthropology program. This course provides an introduction to the basic principles of statistics for social scientists. Topics include the concept of the level of measurement, standardization, the interpretation of graphs, measures of univariate distributions, cross classification, elementary measures of association, the logic of controls, and the basic principles of inferential statistics. The emphasis is on the implications of these statistical techniques for theoretical understanding of sociology and anthropology. *NOTE See §200.7*

SOCI 213 Statistics II (3 credits)

Prerequisite: SOCI 212. Priority to enrol in this course is given to students who are in a Sociology or Anthropology program. This course is designed to follow Statistics I. Topics include measures of association, the principles of probability and sampling distributions, hypothesis testing, and tests of significance. The emphasis is on the implications of these statistical techniques for theoretical understanding in sociology and anthropology. This course also introduces students to SPSS (statistical software). *NOTE See §200.7*

SOCI 221 Sociology of Cyberspace (3 credits)

This course offers a critical examination of the role of electronic communication, information technology, and the Internet on public culture and the organization of social behaviour and interaction.

SOCI 225 Sociology Through Film (3 credits)

The course introduces sociological topics through popular films. Cinema, television, and online videos are selected as examples that can be understood through sociological concepts. Students are provided with a general foundation in sociological thought and interdisciplinary approaches for study at more advanced levels.

NOTE: Students who have received credit for this topic under a SOCI 298 number may not take this course for credit.

SOCI 230 Race and Ethnic Relations (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analyzed in relation to stratification and the exercise of power. The course further involves exploration of the phenomena of discrimination, prejudice, and intergroup accommodation.

SOCI 244 Sociology of Leisure (3 credits)

The course examines the effects of social, economic, and political institutions upon the structure and use of leisure time. The emphasis is upon historical changes and the implications of alienation, anomie, and inequality.

NOTE: Students who have received credit for SOCI 344 may not take this course for credit.

SOCI 250 Sociology of Culture (3 credits)

This course provides an introduction to theory and research on the sociology of culture, the organization and dynamics of cultural systems, cultural production and consumption, subcultures, mass culture, popular culture, and strategies of interpretive analysis for the study of culture.

SOCI 261 Social Problems (3 credits)

Students examine a range of social problems related to aging, health, poverty, population growth, crowding, crime and justice, gender and gender orientation, inequality, media, non-medical drug use, suicide, globalization, and race, ethnicity, and language issues. Attention is focused on the process by which social problems are defined and recognized, and social policies developed and modified.

SOCI 262 Social Deviance (3 credits)

Attention is focused on various forms of anti-social behaviour, particularly those that are socially induced. This course examines the nature, forms, sources, functions, and dysfunctions of deviations from social norms, and the mechanisms of social order and control. Deviance is viewed as a social process of interaction and relationships that derive from the social structure and have consequences for it. Various forms of deviance are considered in terms of contemporary social theory and research.

SOCI 263 Juvenile Crime and Delinquency (3 credits)

This course examines the nature of juvenile crime and delinquency and their social causes and consequences. Juvenile crime and delinquency, as special kinds of deviance, receive the focus of attention, with emphasis on criminal justice, juvenile justice, criminal behaviour systems, and social policy on juvenile crime and delinquency.

SOCI 264 *Sociology of Sport* (3 credits)

This course provides a systematic analysis of the social influences upon sport in North America. Special attention is directed to the interrelationships between sport and various social institutions.

SOCI 274 *The Sociology of Aging* (3 credits)

This course examines the changes in society and in living conditions as populations and people age. The sources and the effects of these changes are looked at in the light of several substantive areas and in terms of their implications for social policy. While the major emphasis is on the Canadian experience, some comparative materials are used to widen the perspective.

SOCI 275 *Self and Society* (3 credits)

This course studies the basic concepts and theories regarding social definitions of the Self. Emphasis is placed on ideas regarding personality, motivation, and interpersonal attitudes, viewed in terms of the interplay between actors and social structures.

SOCI 276 *Gender and Society* (3 credits)

Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.

SOCI 280 *Quebec Society* (3 credits)

Focus upon the historic changes in Quebec society, with emphasis upon the period following the Second World War. Examination of issues which have provoked conflicting interpretations, including the Conquest, the nature of Confederation, Quebec nationalism, and the language question.

SOCI 282 *Canadian Society* (3 credits)

Analysis of Canadian social structure and change; the relation of the whole of Canadian society to its constituent elements; the relation of Canadian society to its international environment.

SOCI 285 *Introduction to Law and Society* (3 credits)

Prerequisite: See N.B. number (3). This interdisciplinary course examines the roles law plays in Canada and internationally, from the perspectives of history, political science, anthropology, sociology, and philosophy.

NOTE: Students who have received credit for ANTH 285, HIST 285, or POLI 285, or for this topic under an ANTH 298, HIST 298, POLI 298, or SOCI 298 number, may not take this course for credit.

SOCI 298 *Selected Topics in Sociology* (3 credits)**SOCI 299 *Selected Topics in Sociology* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 300 *Classical Social Theory* (6 credits)

Prerequisite: See N.B. number (1). This course involves an examination of the origins of sociology and of the sociological works of 19th- and early-20th-century European theorists, with consideration of the social and political context. Particular emphasis is given to the works of Durkheim, Marx, and Weber. Readings include primary sources and critical commentaries.

SOCI 303 *Indigenous Resurgence* (3 credits)

Prerequisite: See N.B. number (1) and (3). Through a selection of case studies from the Americas, Australia, and New Zealand, this course focuses on contemporary indigenous political struggles, cultural resurgence, race and identity, language revival, urbanization, transnational organization, indigenous media, and debates concerning tradition.

NOTE: Students who have received credit for ANTH 303 may not take this course for credit.

SOCI 310 *Research Methods* (3 credits)

Prerequisite: See N.B. number (1); SOCI 212. This course introduces students to the concepts, language, and techniques of quantitative and qualitative research methods. It familiarizes students with the initiation of research problems, the gathering of accurate data, their analysis and the interpretation and reporting of research findings. This course also introduces students to library research.

SOCI 319 *Environment and Society* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a comprehensive introduction to the main environmental issues and dilemmas affecting contemporary societies around the world, as well as the necessary sociological and anthropological tools to understand and tackle these challenges.

NOTE: Students who have received credit for ANTH 319 or for this topic under an ANTH 398 or SOCI 398 number may not take this course for credit.

SOCI 322 *Popular Culture in the Middle East* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course examines areas of contestation between such social forces in the Middle East as the state, elders, women, and youth as they seek to control and define popular culture and everyday practices which have

become highly politicized. Contested domains to be considered include mass media, dance and music, art, rituals, sexuality, and clothing, and their implications for the people and societies involved.

NOTE: Students who have received credit for ANTH 322 or 323, or for this topic under an ANTH 398 or SOCI 398 number, may not take this course for credit.

SOCI 323 *Economy and Society* (3 credits)

Prerequisite: See N.B. number (1). This course examines the ways in which economic activities are legitimated or otherwise affected by social norms and values, and of the ways in which various social systems react to the strains created by the accommodation of new technology and of new industrial organizations.

SOCI 325 *Social Change* (3 credits)

Prerequisite: See N.B. number (1). This course examines the sources, mechanisms, and consequences of social and cultural change. Classical and contemporary theories of change are analyzed, as well as significant empirical studies.

SOCI 331 *Social Inequalities* (3 credits)

Prerequisite: See N.B. number (1). This course examines the dynamics of social stratification and differentiation, including economic distinctions and their consequences, social status, power, and mobility. Emphasis is placed upon Canadian society.

SOCI 333 *Political Sociology* (3 credits)

Prerequisite: See N.B. number (1). This course is concerned with the nature, organization, distribution, determinants, and consequences of power in social systems.

NOTE: Students who have received credit for SCPA 333 may not take this course for credit.

SOCI 336 *Collective Behaviour* (3 credits)

Prerequisite: See N.B. number (1). This course is concerned with the nature, emergence, and dynamics of short-term collective behaviour. Classical and contemporary interpretations of collective behaviour are examined. The course focuses on events such as riots and the emergence of violence in demonstrations related to current social problems and issues in Canada and the United States.

SOCI 338 *Sociology of Religion* (3 credits)

Prerequisite: See N.B. number (1). This course presents an overview of the role of religion in society as found in the pertinent literature of sociology and anthropology. Special consideration is given to the relationship between religion and other social institutions, with particular attention to changes in the religious structures and practices in modern pluralistic societies.

SOCI 341 *Sociology of the Media* (3 credits)

Prerequisite: See N.B. number (1). This course provides an introduction to sociological debates on the relevance and impact of mass media in our society. With a focus on North American media, this course takes a historical perspective to explore the rise of the mass media and the transformation of its relation with culture, especially popular culture. Particular attention is given to themes such as media and identity, national identity; media structures and ownership concentration; media texts and audiences.

SOCI 342 *Sociology of Occupations* (3 credits)

Prerequisite: See N.B. number (1). This course examines the role played by occupations and the world of work in industrialized societies. Economic, social, psychological, and moral attributes of occupations are examined in relation to changing markets for labour. Specific problem areas to be covered include changes in the structure of professions, the effects of changing technology and organizational design on occupational requirements, issues in work and household demands, issues in employment equity and problems of unemployment.

SOCI 346 *Industrialization* (3 credits)

Prerequisite: See N.B. number (1). This course examines processes of industrialization. Analyses are directed primarily towards the Canadian experience and include a consideration of theories regarding industrialization in Canada; an examination of the social and economic impact of large-scale enterprises; the changing role of governments; the ongoing interaction between social organization and advanced technology; and contemporary thought on the social consequences of economic crises.

SOCI 347 *Sociology of Labour-Management Relations* (3 credits)

Prerequisite: See N.B. number (1). This course involves the study of the shifting patterns in labour-management relations with a special focus on Canada. The course includes analyses of theories of management; the impact of the labour union movement, changes in the nature of the labour market; the significance of the growth of the service sector; the changing role of governments in labour-related issues; and contemporary thought on new forms of industrial organization.

SOCI 352 *Population and Environment* (3 credits)

Prerequisite: See N.B. numbers (1) and (3); SOCI 212. Population and environment have become two of the most contested areas for theory, research, policy and public action. The course critically examines the pillars of the population and the environment discourses with attention to differences between developed and developing countries. It provides an overview of the evolution of demands for population control to a common acceptance of a reproductive rights perspective. Similarly, the course focuses on current debates on environment and the management of the global commons from both the industrialized and developing countries' perspectives.

NOTE: Students who have received credit for ANTH 352 may not take this course for credit.

SOCI 353 Community Studies (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course involves the study of communities both as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the community level.

NOTE: Students who have received credit for ANTH 353 or SCPA 353 may not take this course for credit.

SOCI 355 (also listed as ANTH 355)**Urban Regions** (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students who have received credit for ANTH 355 or SCPA 355 may not take this course for credit.

SOCI 358 Social Demography (3 credits)

Prerequisite: See N.B. number (1); SOCI 212. This course provides an introduction to the basic principles, issues, data, and methods of population studies. The emphasis in the course is on social factors that affect demographic processes (fertility, nuptiality, mortality, and migration), and the ways in which demographic change is related to social structure and social change.

SOCI 362 Crime and Justice (3 credits)

Prerequisite: See N.B. number (1). This course provides a critical analysis of the Canadian criminal justice system. The focus is on the process by which the accused is judged guilty or innocent, sentenced, punished or "corrected," and the treatment of the victim.

SOCI 363 Law and Society (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course situates the study of law in cross-cultural perspective. It involves an examination of the kinds of institutions found in place of courts in non-Western societies. This course also explores numerous issues of relevance to the legitimacy of contemporary Western legal systems, such as the relationship between law and morality, the idea of right prior to good, and the nature of legal reasoning.

SOCI 366 The History and Sociology of Genocide to 1945 (3 credits)

This course is crosslisted with HIST 359. Prerequisite: See N.B. numbers (1) and (3). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to genocide up to 1945.

NOTE: Students who have received credit for HIST 359 may not take this course for credit.

SOCI 367 The History and Sociology of Genocide from 1945 to the Present (3 credits)

This course is crosslisted with HIST 360. Prerequisite: See N.B. numbers (1) and (3). Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that led to genocide from 1945 to the present.

NOTE: Students who have received credit for HIST 360 may not take this course for credit.

SOCI 375 Social Construction of Sexualities (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives.

SOCI 376 Socialization (3 credits)

Prerequisite: See N.B. number (1). This course examines the social and cultural processes by which the individual becomes a functioning member of society. Attention is given to adult socialization and re-socialization in diverse institutional contexts such as schools, occupations, hospitals, prisons, the military. The relationship of social structure to role acquisition and role performance is a major focus of the course.

SOCI 378 The Family (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course examines the family as an institution in relation to its evolution from kinship societies up to the present. The course first introduces elementary structures of kinship and examines the family institution in the context of traditional societies. Special attention is devoted to the development of the modern family and to its current transformation.

NOTE: Students who have received credit for ANTH 378 may not take this course for credit.

SOCI 380 Contemporary Issues in Human Rights (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course develops, through case analysis, insight into the differing priorities and competing concepts of human rights and human dignity in "non-Western" cultural traditions as well as in "Western" societies. It explores the significance of religious and other ideological positions in the use and abuse of human rights by governments, extra-governments, international bodies, as well as the general public. The course also examines topics such as women's human rights, sexuality and human rights, and human rights in development, the limits of sovereignty, and state accountability.

NOTE: Students who have received credit for ANTH 380 may not take this course for credit.

SOCI 381 *Ethnic Communities in Canada* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

SOCI 398 *Selected Topics in Sociology* (3 credits)

SOCI 399 *Selected Topics in Sociology* (6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

SOCI 402 *Contemporary Sociological Theory* (3 credits)

Prerequisite: See N.B. number (2); SOCI 300. This course examines contemporary sociological theory. It focuses on how sociologists synthesize concepts from different sociological schools and disciplines (interactionism, phenomenology, functionalism, conflict theory, critical theory, political and moral philosophy) into general theories that seek to explain how social action, structure, the self, symbolic order, communication, technology, and social division are produced and reproduced in modern and postmodern societies. *NOTE: Students who have received credit for SOCI 408 may not take this course for credit.*

SOCI 403 *Contemporary Cultural Theory* (3 credits)

Prerequisite: See N.B. number (2); SOCI 300. This course examines a variety of approaches and area studies (poststructuralism, deconstruction, postcolonialist and cultural studies). It looks at how they shift contemporary sociological theory toward a focus on relations between discourse, knowledge, and power, and toward a critical reflection on cultural systems and institutions. The emphasis is on theories that seek to explain and understand the emergence of cultural politics in modern and postmodern societies. *NOTE: Students who have received credit for SOCI 408 may not take this course for credit.*

SOCI 404 *Sociology of Literature* (3 credits)

Prerequisite: See N.B. number (2); or permission of the undergraduate advisor. This course presents a critical study of literature and para-literature as a cultural and social practice. Various approaches to the sociology of literature are examined. The emphasis is on the social genesis of literature. Selected texts of Canadian fiction and drama are analyzed.

SOCI 406 *Sociology of Knowledge* (3 credits)

Prerequisite: See N.B. number (2). This course examines a variety of theories of the relation of knowledge and belief to social contexts.

SOCI 409 *Honours Seminar* (6 credits)

Prerequisite: See N.B. number (2); SOCI 410 or SOCI 415 previously or concurrently; and permission of the honours advisor. This course involves the student formulating an honours research proposal, and the research and writing of an honours paper.

SOCI 410 *Research Design and Analysis* (6 credits)

Prerequisite: See N.B. number (2); SOCI 310. This course looks at quantitative methods of data collection and analysis. Topics include experimental and quasi-experimental design, principles of measurement, survey design, secondary data sources, techniques of multivariate analysis, and interpretation.

SOCI 415 *Field Research* (6 credits)

Prerequisite: See N.B. number (2); SOCI 310. This course provides the opportunity for advanced qualitative research methods. Students are taught systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing, survey research, and library research.

NOTE: Students who have received credit for SOCI 313, 314, 315 or ANTH 315 may not take this course for credit.

SOCI 430 *Development Debates* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course considers the systematic reduction of poverty and powerlessness at individual and societal levels. Several development problems are examined, including national debt crisis, population growth, urbanization, and various degrees of state withdrawal from regulating the market. Special emphasis is given to case studies from major regions of the Third World on the varied impact of development on gender relations and on the eradication of social and economic inequalities.

NOTE: Students who have received credit for ANTH 430 may not take this course for credit.

SOCI 433 *Theories of Identity* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course discusses theories of difference, pluralism, exclusion, nationalism, and racism within broader frameworks such as citizenship, multiculturalism, diaspora or transnationalism. This course will therefore review related theories of identity as these are currently addressed within anthropology/sociology and related disciplines.

NOTE: Students who have received credit for ANTH 433 may not take this course for credit.

SOCI 437 *Social Movements* (3 credits)

Prerequisite: See N.B. number (2). The nature, emergence, and dynamics of organized collective behaviour and social movements are examined in light of classical and contemporary theories. The course focuses on the impact of leadership, organizational resources, and discontent with institutionalized social relations on social movements. Contemporary social movements in Quebec, the rest of Canada, and the U.S. serve as illustrations.

SOCI 441 Material Culture (3 credits)

Prerequisite: See N.B. numbers (2) and (3). The focus of this course is the study of material objects and technologies and their role in the production of everyday social life and culture.

NOTE: Students who have received credit for ANTH 441 may not take this course for credit.

SOCI 445 Sociology of Labour Movements (3 credits)

Prerequisite: See N.B. number (2). This course analyzes the origins and development of labour movements as well as contemporary characteristics of union organizations within the context of their social, political, and economic environments. Emphasis is placed on Canada and Quebec.

SOCI 451 Citizenship, Eros and the City (3 credits)

Prerequisite: See N.B. number (2). This course invites students to explore the relation between classic and contemporary texts in the field of social and political thought. The three interrelated areas of study include Citizenship, Eros and the City. The course explores diverse theories of democracy, community, love, and civil society. The integrating theme for these three areas is public and private relationships in the city.

SOCI 460 Sociology of Fear and Risk (3 credits)

Prerequisite: See N.B. number (2). This course explores the social, cultural, and historical role of fear in the production of subjects and the control and management of individuals and populations. Topics include surveillance, moral regulation, moral panics, social phobias, terrorism, and the landscape of fear in popular culture. The course also examines the emerging theory of risk society and draws on developments in the sociology of emotions.

SOCI 474 The Body Social (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject is considered in anthropological and sociological perspectives.

NOTE: Students who have received credit for ANTH 474 may not take this course for credit.

SOCI 475 Men and Masculinities (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course is a review of the various and changing roles of men, the meanings of masculinity across cultures and the emerging men's movements. In a dialogue with feminism, the course moves towards humanism.

NOTE: Students who have received credit for ANTH 475 may not take this course for credit.

SOCI 476 Feminist Sociological Theories (3 credits)

Prerequisite: See N.B. number (2). Analysis of recent debates and perspectives within feminist social theory, in particular the concepts of gender, equality, difference, identity, and power; feminist dialogues with, and critiques of, sociological theory.

SOCI 480 Victorian Sociology (3 credits)

Prerequisite: See N.B. number (2). This course provides the opportunity to study the lives and writings of women and men of the 19th century who contributed to the understanding of society and to the emergence of British and American sociology. The research and writings studied include those of Martineau, Tocqueville, Mill, Marx, Engels, Tristan, Maine, Spencer, Harrison, Mayhew, Booth, Gilman, Besant, Veblen, and Webb.

SOCI 498 Advanced Topics in Sociology (3 credits)**SOCI 499 Advanced Topics in Sociology** (6 credits)

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

Programs

ANTHROPOLOGY**60 BA Honours in Anthropology**

- 3 ANTH 202^{3*}
- 3 SOCI 212^{3***}
- 6 200-level ANTH credits
- 3 200-level SOCI credits
- 3 ANTH 212³
- 6 ANTH 311³, 312³
- 6 ANTH 315⁶
- 12 300- or 400-level ANTH credits
- 6 ANTH 495⁶
- 12 400-level ANTH credits

60 BA Specialization in Anthropology

- 3 ANTH 202^{3*}
- 3 SOCI 212^{3***}
- 6 200-level ANTH credits
- 3 200-level SOCI credits
- 3 ANTH 212³
- 6 ANTH 311³, 312³
- 6 ANTH 315⁶
- 30 300- or 400-level ANTH credits (maximum of 15 credits from the 300 level)

60 BA Joint Specialization in Anthropology and Sociology

- 3 ANTH 202^{3*}
- 3 SOCI 203^{3**}
- 6 SOCI 212^{3***}, 213³
- 6 ANTH 311³, 312³
- 6 SOCI 300⁶
- 6 ANTH 315⁶
- 6 400-level ANTH credits
- 6 400-level SOCI credits
- 18 credits of ANTH and SOCI courses (12 credits chosen from crosslisted courses at any level; maximum of six credits at the 200 level chosen from either crosslisted or non-crosslisted courses)

42 BA Major in Anthropology

- 3 ANTH 202^{3*}
- 3 200-level ANTH credits
- 3 200-level ANTH or SOCI credits
- 3 200-level SOCI credits
- 6 ANTH 311³, 312³,
- 6 ANTH 315⁶
- 12 300- or 400-level ANTH credits
- 6 400-level ANTH credits

30 Minor in Anthropology

- 3 ANTH 202^{3*}
- 3 200-level ANTH credits
- 3 200-level ANTH or SOCI credits
- 6 ANTH 311³, 312³
- 12 300-level ANTH credits
- 3 400-level ANTH credits

*Students exempted from ANTH 202³ are required to take three credits from ANTH 200- and 300-level courses.

**Students exempted from SOCI 203³ are required to take three credits from SOCI 200- and 300-level courses.

***Students exempted from SOCI 212³ are required to take three credits from SOCI 200- and 300-level courses.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are open to students who have successfully completed ANTH 202 or equivalent, plus at least three credits of 200-level Anthropology courses.
- (2) 400-level courses are open to students who have successfully completed ANTH 311 and 312, plus at least six credits of 300-level Anthropology courses or permission of the Anthropology advisor.
- (3) Entry requirements for Sociology/Anthropology crosslisted courses depend on the discipline through which the course is entered. Once students have taken a crosslisted course under one disciplinary designation they may not take the course under the corresponding designation in the other discipline for credit.

ANTH 202 Introduction to Culture (3 credits)

An introduction to the anthropological study of culture. The course begins with a consideration of the concepts, models, and methods used by anthropologists. This is followed by an examination of the many ways in which peoples of the world, past and present, have organized the activities, institutions, and belief systems that sustain social life. The course concludes with a discussion of the relevance of cultural anthropology to contemporary issues.

NOTE: Students who have received credit for ANTH 202 may not take this course for credit.

ANTH 203 Culture and Biology: An Anthropological Perspective (3 credits)

This course focuses on the interrelationship between culture and human biology. The first part of the course examines current debates about human origins, human variation, and the influence of cultural adaptation on human biology. This is followed by a critical examination of the strategies of sociobiology for the study of socio-cultural phenomena.

ANTH 204 *Native Peoples of North America* (3 credits)

Focusing primarily on the Native peoples of Canada, this course examines the ecological, economic, social, and religious aspects of Native cultures. A representative society from each geographic area of Canada is studied. This course is primarily ethnographic in emphasis, but it also seeks to provide some of the social and historical background necessary to understand the current situation of Native communities.

ANTH 212 *Elements of Ethno-Linguistics* (3 credits)

This is an introductory course which explores the relationship between language and culture, and the use of language in society. Major issues and debates in ethno-linguistics, socio-linguistics, and philosophy of language are examined.

ANTH 221 *Symbolic Anthropology* (3 credits)

This course examines alternative theoretical approaches to the study of the role of symbols in society. The course is devoted to a consideration of the contributions of structural, psychoanalytic, and interpretive anthropology.

ANTH 230 *Race and Ethnic Relations* (3 credits)

Prerequisite: See N.B. number (3). Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analyzed in relation to stratification and the exercise of power. The course includes explorations of the phenomena of discrimination, prejudice, and intergroup accommodation.

ANTH 231 *Culture and Commerce* (3 credits)

This course explores the influence of cultural values on the organization of the production, distribution or marketing, and the consumption of goods and services at both the local and global levels of the world economy. It also examines the social and environmental impact of the globalization of the consumer society.

ANTH 270 *Anthropology and Contemporary Issues* (3 credits)

This course examines contemporary world issues from a cross-cultural perspective. Discussion ranges from a critical examination of anthropological concepts and methods to a consideration of some of the practical or applied uses of anthropology. Specific topics include the consequences of underdevelopment, modernization, and the place of folk cultures and tradition in an increasingly global society.

ANTH 272 *Comparative Culture* (3 credits)

This course is a general introduction to social and cultural anthropology. It examines the ways in which anthropologists use the comparative method to understand cultures in their unity and diversity. The focus is upon reading ethnographies.

ANTH 276 *Gender and Society* (3 credits)

Prerequisite: See N.B. number (3). This course explores the social construction of gender categories both historically and in the present. The focus is upon examining the various theoretical perspectives which attempt to explain the ways in which society has organized "masculine" and "feminine" as the basis for social inequalities.

ANTH 285 *Introduction to Law and Society* (3 credits)

Prerequisite: See N.B. number (3). This interdisciplinary course examines the roles law plays in Canada and internationally, from the perspectives of history, political science, anthropology, sociology, and philosophy.

NOTE: Students who have received credit for HIST 285, POLI 285, or SOCI 285, or for this topic under an ANTH 298, HIST 298, POLI 298, or SOCI 298 number, may not take this course for credit.

ANTH 298 *Selected Topics in Anthropology* (3 credits)

ANTH 299 *Selected Topics in Anthropology* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 302 *Art, Aesthetics, and Anthropology* (3 credits)

Prerequisite: See N.B. number (1). This course examines the relationship between art and society. It is mainly concerned with analyzing how art may function as a means of signifying and perpetuating a given social order. Examples of artistic practice are drawn from diverse North and South American, African, and Melanesian cultures.

ANTH 303 *Indigenous Resurgence* (3 credits)

Prerequisite: See N.B. number (1) and (3). Through a selection of case studies from the Americas, Australia, and New Zealand, this course focuses on contemporary indigenous political struggles, cultural resurgence, race and identity, language revival, urbanization, transnational organization, indigenous media, and debates concerning tradition.

NOTE: Students who have received credit for SOCI 303 may not take this course for credit.

ANTH 305 *Culture and History* (3 credits)

Prerequisite: See N.B. number (1). This course analyzes some of the ways "history" has been understood both in our own and other cultures, including history as legitimating charter, as repeating cycle, as a scientific inquiry, as a series of unique events, and as a basis for ethical judgments.

ANTH 307 *Understanding Myths* (3 credits)

Prerequisite: See N.B. number (1). This course presents a survey of current anthropological theories of the nature and function of myths. The course also analyzes competing interpretations of some classic Western myths, and concludes with an examination of mythmaking in contemporary Western culture.

ANTH 311 *European Anthropological Theories* (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and post-modernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in “unmaking” theory in anthropology is explored. Emphasis is placed on the history and critique of British and European anthropological traditions.

ANTH 312 *North-American Anthropological Theories* (3 credits)

Prerequisite: See N.B. number (1). This course provides the student with a critical perspective on the historical development of theory in anthropology. Students are introduced to evolutionism, functionalism, structuralism, marxism, and post-modernism by rereading original texts and classical and contemporary ethnography. The role that fieldwork plays in “unmaking” theory in anthropology is explored. Emphasis is placed on the history and critique of American anthropological traditions.

ANTH 315 *Field Research* (6 credits)

Prerequisite: See N.B. number (1). This course provides the opportunity to study and practise qualitative research methods as they are used by anthropologists. Students learn systematic procedures for the collection of primary data using methods that include participant-observation and formal and informal interviewing.

NOTE: Students who have received credit for SOCI 315 may not take this course for credit.

ANTH 319 *Environment and Society* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a comprehensive introduction to the main environmental issues and dilemmas affecting contemporary societies around the world, as well as the necessary sociological and anthropological tools to understand and tackle these challenges.

NOTE: Students who have received credit for SOCI 319 or for this topic under an ANTH 398 or SOCI 398 number may not take this course for credit.

ANTH 322 *Popular Culture in the Middle East* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course examines areas of contestation between such social forces in the Middle East as the state, elders, women, and youth as they seek to control and define popular culture and everyday practices which have become highly politicized. Contested domains to be considered include mass media, dance and music, art, rituals, sexuality, and clothing, and their implications for the people and societies involved.

NOTE: Students who have received credit for ANTH 323 or SOCI 322, or for this topic under an ANTH 398 or SOCI 398 number, may not take this course for credit.

ANTH 324 *Peoples and Cultures of Oceania* (3 credits)

Prerequisite: See N.B. number (1). This course presents an overview of the peoples and cultures of Oceania, with particular emphasis on Melanesia. In addition to studying the peopling of the Pacific, the course delves into a range of classic anthropological topics, and addresses contemporary issues of gender, migration, and urbanization.

ANTH 325 *Magic, Science, Religion, and Ideology* (3 credits)

Prerequisite: See N.B. number (1). This course analyzes belief systems and their attendant rituals and practices. The focus is on how anthropologists differentiate between magic, science, religion, and ideology, and how anthropologists understand the relationship between belief systems and reality.

ANTH 326 *Peoples and Cultures of Sub-Saharan Africa* (3 credits)

Prerequisite: See N.B. number (1). The course gives a broad historical and geographical survey of the region, and discusses, through case studies, older and contemporary topics, debates, and issues of African anthropology.

ANTH 332 *Health, Illness and Healing in Cross-Cultural Perspective* (3 credits)

Prerequisite: See N.B. number (1). This course involves the exploration of a series of alternatives to Western ways of defining health and treating sickness, with particular emphasis on shamanistic and East Asian medicine. The major part of the course is devoted to the study of ethnomedicine, and exploring some of the central questions of transcultural psychiatry. The course concludes with a discussion of the role of the anthropologist in international health-planning.

ANTH 345 *Anthropology of Movement and Travel* (3 credits)

Prerequisite: See N.B. number (1). Using anthropological literature, this course examines the processes, policies, and issues that may be common to different categories of travel and movement as well as those that can distinguish between them.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 352 *Population and Environment* (3 credits)

Prerequisite: See N.B. numbers (1) and (3); SOCI 212. Population and environment have become two of the most contested areas for theory, research, policy and public action. The course critically examines the pillars of the population and the environment

discourses with attention to differences between developed and developing countries. It provides an overview of the evolution of demands for population control to a common acceptance of a reproductive rights perspective. Similarly, the course focuses on current debates on environment and the management of the global commons from both the industrialized and developing countries' perspectives.

NOTE: Students who have received credit for SOCI 352 may not take this course for credit.

ANTH 353 *Community Studies* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course involves the study of communities both as locales and as symbolic constructions. The major theoretical approaches used in community studies are evaluated in relation to research and applied interests. Special attention is given to sensitizing students to issues concerning gender, race, ethnicity, and class at the local level.

NOTE: Students who have received credit for SOCI 353 or SCPA 353 may not take this course for credit.

ANTH 355 *(also listed as SOCI 355)*

***Urban Regions* (3 credits)**

Prerequisite: See N.B. numbers (1) and (3). This course reviews the work of anthropologists and sociologists in cities. The focus is on the social organization of social life in First and Third World urban spaces. Consideration is also given to the particular dynamics of fieldwork in urban settings.

NOTE: Students who have received credit for SOCI 355 or SCPA 355 may not take this course for credit.

ANTH 361 *Kinship* (3 credits)

Prerequisite: See N.B. number (1). This course addresses both classical and contemporary issues in kinship studies, with particular emphasis on the following areas: filiation, adoption, descent, genealogies; rules of residency, private and public spheres; incest, sex, and marriage; terminologies and attitudes.

ANTH 363 *Law and Society* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course situates the study of law in cross-cultural perspective. It involves an examination of the kinds of institutions found in place of courts in non-Western societies. This course also explores numerous issues of relevance to the legitimacy of contemporary Western legal systems, such as the relationship between law and morality, the idea of right prior to good, and the nature of legal reasoning.

ANTH 375 *Social Construction of Sexualities* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course provides a cross-cultural, interdisciplinary approach to the study of human sexuality. There are three major components. One explores the validity of contemporary sexual beliefs and attitudes. Another focuses on the extent to which sexual beliefs and behaviours are socially organized. A third provides an introduction to theories which examine how biological and/or social forces shape our sexual lives.

ANTH 377 *Visual Anthropology* (3 credits)

Prerequisite: See N.B. number (1). In looking at the history of ethnographers' visual documentation of non-Western peoples as well as indigenous self-representations, this course primarily concerns itself with power and the development of professional anthropology, focusing on photography and film. It explores paradigms and case studies in the history of visual anthropology by highlighting the stylistic, social scientific, commercial, and political agendas that influence the production of visual documents. Starting with colonial exhibitions of "exotic natives," the course progresses to classic and contemporary ethnographic film with a focus on Curtis, Flaherty, Mead, Gardner, Rouch, and MacDougall.

NOTE: Students who have received credit for this topic under an ANTH 398 number may not take this course for credit.

ANTH 378 *The Family* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course examines the family as an institution in relation to its evolution from kinship societies up to the present. The course first introduces elementary structures of kinship and examines the family institution in the context of traditional societies. Special attention is devoted to the development of the modern family and to its current transformation.

NOTE: Students who have received credit for SOCI 378 may not take this course for credit.

ANTH 379 *Cross-Cultural Perspectives on Gender* (3 credits)

Prerequisite: See N.B. number (1). The course explores through different theoretical perspectives and ethnographic examples, cross-cultural differences in sex/gender systems. A comparative analysis of gender relations in band, tribal, and state societies is undertaken. Topics discussed include the sexual division of labour, the cultural and social construction of gender, and the impact of economic development.

NOTE: Students who have received credit for SOCI 379 may not take this course for credit.

ANTH 380 *Contemporary Issues in Human Rights* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). The course develops, through case analysis, insight into the differing priorities and competing concepts of human rights and human dignity in "non-Western" cultural traditions as well as in "Western" societies. It explores the significance of religious and other ideological positions in the use and abuse of human rights by governments, extra-governments, international bodies, as well as the general public. The course also examines topics such as women's human rights, sexuality and human rights, and human rights in development, the limits of sovereignty, and state accountability.

NOTE: Students who have received credit for ANTH or SOCI 380 may not take this course for credit.

ANTH 381 *Ethnic Communities in Canada* (3 credits)

Prerequisite: See N.B. numbers (1) and (3). This course aims at familiarizing students with the social factors and dynamics of contemporary ethno-cultural communities in Canada. Topics may include the immigration process and settlement; community development, structures, and organizations; the ethnic family; socio-economic status and achievement; cultural continuity and change; minority-majority relations and relations with other ethno-cultural communities.

ANTH 385 *Globalization and Transnationality* (3 credits)

Prerequisite: See N.B. number (1). Globalization has been used generally to denote the increasingly rapid and far-flung circulation of people, money, commodities, and images around the world. This course introduces students to a sample of issues covered by anthropologists and sociologists in respect to this process, while at the same time also exploring transnational social networks that cross state borders but are not necessarily global in scope.

NOTE: Students who have received credit for SOCI 385 may not take this course for credit.

ANTH 398 *Selected Topics in Anthropology* (3 credits)

ANTH 399 *Selected Topics in Anthropology* (6 credits)

Prerequisite: See N.B. number (1). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

ANTH 420 *Psychological Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course examines and critiques the theoretical concepts of Western academic and folk psychology from the perspective of the psychologies of other cultures. Topics considered include the cultural construction of the emotions, personality development, perception, culture-bound psychiatric syndromes (such as windigo psychosis, amok), and altered states of consciousness, and indigenous theories of dream interpretation.

ANTH 423 *Political Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course examines the political process and political organization in cross-cultural perspective. The focus is on how order is achieved in the absence of the state, as well as questions of leadership, power, and authority in different social contexts.

ANTH 424 *Experiments and Experience in Ethnographic Writing* (3 credits)

Prerequisite: See N.B. number (2). This course examines debates that stemmed from the postmodern critique of representation in anthropology in the mid-1980s. This critique has highlighted new politics for the writing of ethnographic texts, as well as raised a number of epistemological questions relating to the ontological status of truth. The course focuses on recent experiments in ethnographic writing and on dynamics of fieldwork experience.

NOTE: Students who have received credit for ANTH 422 may not take this course for credit.

ANTH 425 *Religions in the 21st Century* (3 credits)

Prerequisite: See N.B. number (2). This course examines the contemporary roles of religion as systems of meaning, a focus of social claims, and as elements of self-expression. This discussion is set within the historical trajectories of instances of globalization, such as colonization and the spread of world religions, conversions to Christianity and liberation theories, the politicization of Islam, or the emergence of New Age religions as new forms of identity.

ANTH 430 *Development Debates* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course considers the systematic reduction of poverty and powerlessness at individual and societal levels. Several development problems are examined, including national debt crisis, population growth, urbanization, and various degrees of state withdrawal from regulating the market. Special emphasis is given to case studies from major regions of the Third World on the varied impact of development on gender relations and on the eradication of social and economic inequalities.

NOTE: Students who have received credit for SOCI 430 may not take this course for credit.

ANTH 431 *Neo-Marxism and Cultures* (3 credits)

Prerequisite: See N.B. number (2). This course analyzes the relationships between economy and cultural systems. The first section is devoted to the concept of economic base and superstructure in the industrial world; the second section focuses on selected case studies of non-industrial cultures and industrial cultures. The course concludes with an appraisal of the quality of economic life in non-industrial cultures.

ANTH 433 *Theories of Identity* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course discusses theories of difference, pluralism, exclusion, nationalism, and racism within broader frameworks such as citizenship, multiculturalism, diaspora or transnationalism. This course will therefore review related theories of identity as these are currently addressed within anthropology/sociology and related disciplines.

NOTE: Students who have received credit for SOCI 433 may not take this course for credit.

ANTH 440 *Culture, Language, and Mind* (3 credits)

Prerequisite: See N.B. number (2); ANTH 212. This course looks at the relationship between linguistics and anthropology, and examines some of the issues in the linkage between language, culture, and thought.

ANTH 441 *Material Culture* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course studies material objects and technologies and their role in the production of everyday social life and culture.

NOTE: Students who have received credit for SOCI 441 may not take this course for credit.

ANTH 463 *Current Debates in Kinship* (3 credits)

Prerequisite: See N.B. number (2). From its inception, the anthropological investigation of kinship has been centred around organization and regulation of so-called biological facts such as procreation and genetic relatedness or "consanguinity." The course examines how international adoption, new reproductive technologies, and gay and lesbian kinship reshape the way people think about kinship.

ANTH 465 *Legal Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course analyzes the legal system as an institutionalized system of social control and meanings, using historical and comparative data. Special attention is given to the study of the interface of law and other areas of sociological inquiry, including social change, conflict, and decision-making.

ANTH 471 *Anthropology of Food* (3 credits)

Prerequisite: See N.B. number (2). This course approaches food through four main themes: archaeology of food production (domestication of plants and animals); class, cuisine, and the development of taste; cosmic and other symbolism of food; and the political economy of food and hunger.

ANTH 472 *Childhood and Youth* (3 credits)

Prerequisite: See N.B. number (2). This course examines the increasingly diverse field of anthropological research on children and youths. This field of interest has recently been expanded to consider a wide range of arenas in which children and youth may be implicated across the world, such as consumption, mobility, media, work, and conflict.

NOTE: Students who have received credit for SOCI 472 may not take this course for credit.

ANTH 474 *The Body Social* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course examines the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body language, health and fitness, eating and drinking patterns. The subject is considered in anthropological and sociological perspectives.

NOTE: Students who have received credit for SOCI 474 may not take this course for credit.

ANTH 475 *Men and Masculinities* (3 credits)

Prerequisite: See N.B. numbers (2) and (3). This course is a review of the various and changing roles of men, the meanings of masculinity across cultures and the emerging men's movements. In a dialogue with feminism, the course moves towards humanism.

NOTE: Students who have received credit for SOCI 475 may not take this course for credit.

ANTH 477 *Elites, Privilege and Relative Advantage* (3 credits)

Prerequisite: See N.B. number (2). This course reviews the analytical and comparative challenges posed by the study of the elites such as scientists, entrepreneurs, and politicians. More modest forms of relative advantage and privilege are also addressed.

NOTE: Students who have received credit for this topic under an ANTH 498 number may not take this course for credit.

ANTH 479 *Feminism and Anthropology* (3 credits)

Prerequisite: See N.B. number (2). This course explores the dialogue between feminist theory and anthropology. Topics discussed include "feminist standpoint" theory and the critique of "objectivity" in feminist philosophy of science; feminist contributions to the historical development of anthropological theory; and the relationship between feminism and postmodernism in current debates on ethnography and fieldwork.

ANTH 495 *Honours Essay* (6 credits)

Prerequisite: See N.B. number (2); ANTH 315; and permission of the honours advisor. Under the supervision of an Anthropology staff member, the student prepares an honours essay on a subject chosen in consultation with and approved by the professor.

ANTH 498 *Advanced Topics in Anthropology* (3 credits)

ANTH 499 *Advanced Topics in Anthropology* (6 credits)

Prerequisite: See N.B. number (2). Specific topics for these courses will be stated in the Undergraduate Class Schedule and the Departmental Handbook.

31.330

THEOLOGICAL STUDIES

Faculty

Chair

LUCIAN TURCESCU, PhD St.M.Coll.Tor., Professor

Associate Professors

PAUL ALLEN, PhD St.Paul/Ott.

MARIE-FRANCE DION, PhD Montr.

ANDRÉ GAGNÉ, PhD Montr./UCLouvain, Belgium

CHRISTINE JAMIESON, PhD St.Paul/Ott.

Assistant Professor

JEAN-MICHEL ROESSLI, PhD Frib./Sorbonne

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex D

514-848-2424, ext. 2475

Department Objectives

Theology builds a bridge between religious experience and human society. To expand understanding of the human person and of God, the Department seeks to make accessible to all its students an immense tradition of knowledge — especially through interpretation theory, historical analysis, psychological insight, and theoretical elaboration.

The Department is dedicated to training professional theologians and researchers while expanding the horizons of those who wish to appreciate their heritage.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students must have their programs approved by the Department.

Students will be admitted to the Certificate in Pastoral Ministry with the permission of the Department. Admission will be based on the number of available places and upon evaluation of the candidates' letter of intent and an interview dealing with their educational background and community experience.

All courses in the Department are open to any qualified student of Concordia.

60 BA Honours in Theological Studies

3 THEO 393³

18 THEO 201³, 202³, 203³, 204³, 205³, 206³

3 Chosen from THEO 301³, 302³, 303³, 304³ (*Old Testament*)

3 Chosen from THEO 311³, 315³, 317³ (*New Testament*)

3 Chosen from THEO 320³, 322³ (*History*)

3 Chosen from THEO 212³, 331³, 333³, 337³ (*Systematics*)

3 Chosen from THEO 351³, 353³ (*Ethics*)

3 Chosen from THEO 236³, 242³, 245³, 291³, 347³ (*Spirituality*)

12 THEO 406³, 408³, 410³, 460³

3 Chosen from cognate courses in Classics, History, Philosophy, Psychology, Religion, Sociology, in consultation with the honours advisor. Students, in consultation with the honours advisor, may choose a course in another cognate discipline.

6 Chosen from courses in the ancient and/or modern languages of Classical Greek, Biblical Greek (THEO 495, 496), Biblical Hebrew (THEO 492, 493), Modern Hebrew, Latin, French, German, Italian, Spanish, in consultation with the honours advisor

NOTE: With the permission of the Department, three credits in a cognate discipline may be substituted for a THEO elective.

42 BA Major in Theological Studies

- 15 THEO 201³, 202³, 203³, 204³, 205³
- 3 Chosen from THEO 301³, 302³, 303³, 304³ (*Old Testament*)
- 3 Chosen from THEO 311³, 315³, 317³ (*New Testament*)
- 3 Chosen from THEO 206³, 320³, 322³ (*History*)
- 3 Chosen from THEO 212³, 331³, 333³, 337³ (*Systematics*)
- 3 Chosen from THEO 351³, 353³ (*Ethics*)
- 3 Chosen from THEO 236³, 242³, 245³, 291³, 347³ (*Spirituality*)
- 9 Chosen from any of the Theology offerings

NOTE: With the permission of the Department, three credits in a cognate discipline may be substituted for a THEO elective.

24 Minor in Theological Studies

- 12 THEO 201³, 202³, 203³, 204³
- 12 Chosen from other Theology offerings

30 Certificate in Pastoral Ministry

- 15 THEO 203³, 402³, 404³; AHSC 230³, 232³
- 3 Chosen from THEO 315³, 317³
- 3 Chosen from THEO 206³, 320³, 322³
- 3 Chosen from THEO 204³, 351³, 353³
- 3 Chosen from THEO 233³, 331³, 333³, 337³
- 3 Chosen from THEO 205³, 236³, 242³, 245³, 291³, 347³

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

THEO 201 Introduction to Theological Studies (3 credits)

This course introduces students to the history, sources, and basic structure of Christian theology. A survey of certain interrelationships between theology and other disciplines is provided as well as an introduction to contemporary approaches to God and topics such as Jesus Christ, sin, and redemption.

THEO 202 Introduction to Biblical Studies (3 credits)

This course provides a survey of the contents of the Bible, from Genesis to Revelation, and a practical introduction to the skills required to understand biblical texts. Attention is paid to diverse approaches to interpretation which are used in historical, literary, or theological study of the Bible.

NOTE: Students who have received credit for THEO 202 may not take this course for credit.

THEO 203 Introduction to New Testament (3 credits)

This course deals with the writings of the New Testament with an emphasis on both content and form. As well, students are introduced to the socio-political, economic, and cultural backdrops within which earliest Christianity arose and began to spread.

THEO 204 Introduction to Christian Ethics (3 credits)

This course is an introduction to the field of ethics in the context of Christian faith. Christian ethics is presented as an active quest towards understanding and guiding Christian moral living. There is a brief presentation of the historical background to Christian ethics, an exploration of the points of convergence with other religious traditions, as well as the interrelationship between morality and freedom. The course will include a reflection on the problem of evil as a diminishment of persons and societies as well as a section on moral development and moral maturity.

NOTE: Students who have received credit for THEO 204 may not take this course for credit.

THEO 205 Introduction to Christian Spirituality (3 credits)

The characteristics of Christian spirituality, its roots in scripture, the balance between contemplation and action, its communal dimension, its attitude to the world, are analyzed through the study of a selection of men and women whose lives exemplify various aspects of Christian spirituality over the past two thousand years. The course examines notions of transcendence and immanence, individuality and collectivity, nature and the divine.

NOTE: Students who have received credit for THEO 204 may not take this course for credit.

THEO 206 Introduction to Christian Origins (3 credits)

This course is a study of the historical origins of the Church with a view to understanding the creative originality of the Christian tradition. It explores possibilities for the rethinking of contemporary Christianity in light of the common sources of diverse Christian traditions.

THEO 212 Faith, Reason and the Religious Sense (3 credits)

This course investigates the basic human search for meaning and value in the context of the variety of models of revelation. It considers how religious experience is understood in the light of the psychology of religion and faith.

THEO 226 *Theology and Myth* (3 credits)

This course is a comparative study of mythology. The focus is on the role of myths in Christian theology, e.g. creation myths, origins of humanity, salvation myths, and others.

THEO 228 *Celtic Christianity* (3 credits)

This course follows a historical line to show the connections of the pre-Christian Celtic beliefs with the early Christian Church of Celtic countries. It focuses on the spirituality of the Celtic people in the context of Celtic history and culture.

NOTE: Students who have received credit for THEO 208 or 327, or for this topic under a THEO 298 or IRST 298 number, may not take this course for credit.

THEO 233 *Religious Pluralism in a Secular Culture* (3 credits)

This course focuses on the relationships between religion, pluralism, and secular culture. It deals specifically with secularization, secularism and theological responses that are rooted in historical discourses of church/state relations.

NOTE: Students who have received credit for THEO 233 may not take this course for credit.

THEO 236 *Spirituality: Personal, Social and Religious Dimensions* (3 credits)

This course focuses on the phenomenon of spirituality as a personal and social response to the human quest for self-integration and self-transcendence. It examines the roles of both religious tradition and secular culture in shaping approaches to the spiritual journey. Consideration of the characteristics of Christian spiritual traditions is complemented by reflection upon the meaning and variety of spiritualities present in the pluralistic postmodern culture.

THEO 238 *Theology in Film* (3 credits)

This course examines a series of films to uncover their theological preoccupations, motives, and questions. Methods of analyses are discussed, in conjunction with screenings of selected films.

THEO 242 *Theology and the Arts* (3 credits)

This course explores a wide variety of ancient, modern, and contemporary artistic media — painting, sculpture, architecture, glass, music, literature, and multimedia — in order to uncover a theological understanding of artistic activity. It investigates the ways in which artists explore apprehensions of transcendence and the artistic imagination.

THEO 245 *The Creative Self* (3 credits)

This course helps students explore their own creative processes in order to come to a deeper appreciation of the infinite human capacity for creation, and thus, self-transcendence. It considers the cognitive dimensions of the creative processes, their ethical aspects, their expression in human action, and their impact on ultimate value and meaning.

NOTE: Students who have received credit for this topic under a THEO 298 number may not take this course for credit.

THEO 291 *The Icon: Theology in Colour* (3 credits)

The icon is both a theological medium and a theological message. The first is expressed by design, the latter by colour. The study of the icon offers the student an opportunity to explore theological meaning through image and symbolism as well as concept and reasoning.

NOTE: Students who have received credit for THEO 276 may not take this course for credit.

THEO 295 *Theology and Women* (3 credits)

This course explores the emergence of a body of scholarly writing by women theologians. It looks at their questions and the critiques of traditional theological doctrines and interpretations, as well as suggesting different hermeneutical approaches to exegesis, theology, and history.

NOTE: Students who have received credit for THEO 271 may not take this course for credit.

THEO 298 *Selected Topics in Theological Studies* (3 credits)**THEO 299 *Selected Topics in Theological Studies* (6 credits)**

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

THEO 301 *The Pentateuch* (3 credits)

The objective of this course is to familiarize students with the first five books of the Bible, known as the Pentateuch. The course considers literary criticism pertaining to the composition of the Pentateuch, its themes, and their theological meanings.

THEO 302 *Historiographies in the Hebrew Bible* (3 credits)

Beginning with an introduction to biblical historiographies, this course discusses the Deuteronomistic historiography (Joshua, Judges, Books of Samuel, Books of Kings) and compares it to the historiography of Ezra/Nehemiah and Chronicles. Literary and theological issues are discussed throughout the course.

THEO 303 *Themes in the Hebrew Bible* (3 credits)

This course studies in depth the roots and developments of particular biblical traditions. It focuses on the history of different interpretations of such specific biblical themes as divine election, covenants, promises, worship, and sacrifices.

THEO 304 *Prophetic and Wisdom Literature in the Hebrew Bible* (3 credits)

This course introduces the prophetic, wisdom, and deuterocanonical books of the Hebrew Bible. Topics discussed are literary genres, historical contexts, and theological themes, as well as the phenomenon of prophecy in the ancient Near East, the historical settings for the biblical prophetic and wisdom literature, the language, and the message of these biblical books.

THEO 311 *Johannine Literature* (3 credits)

This course offers an in-depth study of the Gospel of John and the three letters of John. The differences between the Johannine school of thought and the Synoptic tradition (Matthew, Mark, and Luke) with respect to christology, faith, salvation, and the role of the spirit are examined.

THEO 315 *Gospels and Acts* (3 credits)

This course is an introduction to the texts and teachings of the four canonical Gospels and to the Acts of the Apostles.

THEO 317 *The Pauline Letters* (3 credits)

This course is an introduction to Paul and his letters. In studying these writings, students engage in close examination of parts of the text (exegesis) and also discover the history and context of earliest Christianity.

THEO 319 *Gnosticism and the New Testament* (3 credits)

This course introduces various Gnostic texts which are then compared and contrasted with the canonical Gospels of the New Testament. Themes such as salvific knowledge, cosmogony and creation, anthropogony, Christology, and soteriology are also considered from a comparative perspective.

NOTE: Students who have received credit for this topic under a THEO 298 number may not take this course for credit.

THEO 320 *History of Christianity: The Medieval Period* (3 credits)

This course explores the history of Christianity from the fall of the Western Roman Empire in the fifth century to the beginning of the Renaissance in the 15th century. The diverging experiences of the churches in East and West are studied, with attention to the development of Christian beliefs, art, philosophy, and institutions, and the major religious and political figures who influenced these developments.

THEO 322 *History of Christianity: Reformation and Modernity* (3 credits)

This course explores the history of Christianity from the reformation through to the closing decades of the 20th century, with special attention given to the Protestant Reformation and to the impact of the Enlightenment on the theology, institutions, ethics, and intellectual life of modern Christians.

THEO 324 *Roman Catholicism* (3 credits)

This course offers an introduction to the contemporary Roman Catholic experience, and includes a treatment of the historical origins of Catholicism, its worship and liturgy, its spirituality, and its role in society and culture.

NOTE: Students who have received credit for THEO 211 may not take this course for credit.

THEO 331 *The Christian Understanding of God* (3 credits)

This course examines the classical presentation of Christian belief in God as a Trinity of divine persons through its biblical origins and historical development. It also examines modern theological reflection on this classical view, including perspectives from non-Western cultural contexts.

THEO 333 *Jesus Christ in History and Faith* (3 credits)

This course studies the biblical and later traditions about the person, nature, and work of Christ in the Christian tradition. Texts studied include the Bible, theological texts from a variety of historical periods as well as some literary and artistic presentations of Christ.

THEO 337 *The Christian Sacraments* (3 credits)

This course examines the history, symbols, and images of ritual and liturgical communication in Christianity, especially in baptism and eucharist. These "mysteries," as the Christian sacraments were originally called, are studied in the context of a Christian life.

THEO 343 *Religion and Politics* (3 credits)

Focusing on the relationship between church, state, and democracy, this course examines the intersection of religion and politics by studying the connections between moral values and political beliefs in different settings around the world. It explores how religious beliefs have shaped politics and have impacted democratization, education, and citizenship. At the same time, it reflects on the way in which politics has affected religious life and religious organizations.

THEO 347 *Spirituality of Aging* (3 credits)

This course deals with the spirituality of aging through a number of important themes: mid-life crises, intergenerational conflicts, sexuality, theology of the body, relationships, death and dying.

NOTE: Students who have received credit for this topic under a THEO 298 or THEZ 298 number may not take this course for credit.

THEO 351 *Applied Ethical Issues* (3 credits)

This course provides students with a method for ethical deliberation and explores ethical issues challenging contemporary society such as euthanasia, health care, the economy, and scientific and technological advances.

THEO 353 *Theology and Bioethics* (3 credits)

This course presents major frameworks for examining issues in bioethics and explores case studies to familiarize students with ethical issues in the biomedical context. Ethical issues in health care and research involving human subjects in light of a theological perspective on life, death and moral existence are explored.

THEO 393 *Philosophical Foundations of Christian Theology* (3 credits)

Prerequisite: 24 credits. This survey course investigates the philosophical outlook and language of theological doctrines and Christian thinkers in various historical periods. Questions of truth, meaning, and goodness are examined in light of Christian interpretations of Plato and Aristotle. Contemporary topics at the intersection of philosophy and theology, such as human sexuality, political philosophy, and scientific theories, are also treated.

NOTE: Students who have received credit for THEO 293 may not take this course for credit.

THEO 398 *Selected Topics in Theological Studies* (3 credits)

THEO 399 *Selected Topics in Theological Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: All 400-level Theology courses have as their prerequisite an appropriate 300-level Theology course, or its equivalent, with permission of the Department.

THEO 402 *Pastoral Ministry* (3 credits)

This course introduces students to the history and theology of pastoral ministry. Particular attention is given to theological sources and spiritual resources available to the minister in a variety of pastoral settings.

THEO 404 *Practicum in Pastoral Ministry* (3 credits)

Prerequisite: THEO 402 and permission of the Department. This course complements THEO 402 as the internship and field exploration of a particular pastoral ministry. It will be supervised by experts or experienced individuals in the various fields of ministry, e.g. eldercare, bereavement, hospital, school, youth ministries, and others.

THEO 406 *Scriptural Exegesis* (3 credits)

Prerequisite: THEO 202 or 203; THEO 301. This course initiates students in the historical-critical methodology used in the study of the Bible and familiarizes them with biblical research tools.

NOTE: Students who have received credit for this topic under a THEO 498 number may not take this course for credit.

THEO 408 *Classical Theological Texts: Reading and Interpretation* (3 credits)

Prerequisite: THEO 201; THEO 331 or 333 or 337, or permission of the Department. This course provides students with the interpretive skills that permit critical responses to texts. Classical texts are analyzed in terms of the elements of context, structure, form, and content. The course covers classical theological writings from the fourth to the 20th century.

NOTE: Students who have received credit for this topic under a THEO 498 number may not take this course for credit.

THEO 410 *Honours Tutorial* (3 credits)

Prerequisite: Permission of the Department; enrolment in the honours program. This course provides students with background studies in central theological issues and writers. Students prepare an annotated bibliography as part of the requirements of the course.

THEO 460 *Honours Essay* (3 credits)

Prerequisite: THEO 410 previously or concurrently; permission of the Department; enrolment in the honours program. Each student works with an individual faculty member in a particular area of theological studies to produce a research paper of about 40 pages in length.

THEO 492 *Biblical Hebrew I* (3 credits)

No prior knowledge of the Hebrew language is necessary. With a view to reading and comprehending simple biblical narratives in Hebrew, students learn the rudiments of Biblical Hebrew from the alphabet, vocabulary, and the basic grammar.

NOTE: Students who have received credit for this topic under a THEO 498 number may not take this course for credit.

THEO 493 *Biblical Hebrew II* (3 credits)

Prerequisite: THEO 492. This course continues the objectives of Biblical Hebrew I. With a view to reading and comprehending simple biblical narratives in Hebrew, students learn problematic verb forms, grammatical constructions, and text linguistics. By the end of this course students are able to read, analyze, and translate biblical narratives.

NOTE: Students who have received credit for this topic under a THEO 498 number may not take this course for credit.

THEO 495 *Biblical Greek I* (3 credits)

This is an introductory course to Greek Koine. No prior knowledge of the Greek language is necessary. It provides the student with a basic understanding of New Testament Greek.

THEO 496 *Biblical Greek II* (3 credits)

Prerequisite: THEO 495. This course builds on the material presented in Biblical Greek I. By the end of the course, students will be able to analyze and translate biblical texts.

THEO 497 *Selected Topics in Theological Studies* (3 credits)

THEO 498 *Selected Topics in Theological Studies* (3 credits)

THEO 499 *Advanced Topics in Theological Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.400

COMPUTER SCIENCE

The Department of Computer Science and Software Engineering offers a Minor in Computer Science available to students in the Faculty of Arts and Science. For further details on this program, see §71.70.5.

31.500

COLLEGES, INSTITUTES AND SCHOOLS

Students benefit from the rich variety of academic resources provided by Concordia University. In addition, the Faculty of Arts and Science has established several programs distinguished by the fact that they are housed in small units which integrate various aspects of undergraduate student life at Concordia. These programs admit a certain number of applicants each year, and offer their students the opportunity to study with a group of students and faculty members sharing the same interests. Students can draw on the intimacy of dedicated classrooms, faculty offices, and student lounges as they study and relax with each other and with their professors, while taking full advantage of the facilities of the University at large.

There are three colleges, one institute, and two schools that offer these benefits: the Liberal Arts College, the Science College, the Loyola College for Diversity and Sustainability, the Simone de Beauvoir Institute, the School of Canadian Irish Studies, and the School of Community and Public Affairs. The Liberal Arts College offers a Major and Honours in Western Society and Culture; the Science College provides a Minor in Multidisciplinary Studies in Science; and the Loyola College for Diversity and Sustainability offers both a Minor in Diversity and the Contemporary World and a Minor in Sustainability Studies. The Simone de Beauvoir Institute houses a Specialization, Major, Minor, and Certificate in Women's Studies. The School of Canadian Irish Studies offers a Minor and Certificate in Canadian Irish Studies, while the School of Community and Public Affairs sponsors a Major in Community, Public Affairs and Policy Studies. Any of these programs may be supplemented by a major or a minor in another department or discipline. For further information about the academic requirements for any of these programs, please consult the appropriate section of the Undergraduate Calendar.

Whether as a major concentration or a minor, these programs extend to students a stimulating opportunity to share in the academic life of the college, institute, or school through special courses, seminars, guest lectures, tutorials, and social and cultural activities, all planned to build on the shared interests of the community. These programs are intended to blend high academic standards, rigorous programs of study, and close collegial relationships to provide an intimate and stimulating atmosphere within the University.

31.515

CO-OPERATIVE EDUCATION

Through the Institute for Co-operative Education, the University offers programs in the co-operative format in the departments of Chemistry and Biochemistry, Economics, Études françaises, Mathematics and Statistics, and Physics in the Faculty of Arts and Science; in the departments of Building, Civil and Environmental Engineering, Computer Science and Software Engineering, Electrical and Computer Engineering, and Mechanical and Industrial Engineering in the Faculty of Engineering and Computer Science; and in the departments of Accountancy, Decision Sciences and Management Information Systems and Marketing in the John Molson School of Business.

Co-operative programs in the Faculty of Arts and Science are open to students who are enrolled in many of the honours and specialization programs offered by the above departments.

As it becomes feasible the University may consider offering other disciplines in the co-op format.

(Please see §24 of this Calendar.)

31.520 LIBERAL ARTS COLLEGE

Principal and Permanent Fellow

ERIC BUZZETTI, PhD Boston Coll., Associate Professor

Permanent Fellows

JARRETT CARTY, PhD Notre Dame, Associate Professor

IVANA DJORDJEVIC, PhD McG., Associate Professor

GEOFFREY C. FIDLER, PhD McG., Associate Professor and Vice-Principal

ARIELA FREEDMAN, PhD N.Y., Associate Professor

TOBIAS FOSTER GITTES, PhD Col., Associate Professor

FREDERICK H. KRANTZ, PhD C'nell., Professor

MARK RUSSELL, PhD Camb., Associate Professor

KATHARINE STREIP, PhD Calif.(Berkeley), Associate Professor

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex RR, Room: 103

514-848-2424, ext. 2565

Objectives

The Liberal Arts College, a small community of fellows and students, provides a unique liberal arts emphasis within the Faculty of Arts and Science. Built on a core of eight courses, the multidisciplinary curriculum is designed to guide students in exploring the foundations and development of Western civilization and culture. The aim is to foster the major values of the Western tradition — those of critical thinking and respect for intellectual freedom.

The major goal of Liberal Arts College is to assist the student in the process of becoming an educated person. The College seeks to translate into modern idioms the traditional vision of education as a preparation for life. Its core courses and seminars, sharing a common concern with the changing nature of society and culture, aim at the development of an informed critical consciousness. Emphasis is also placed on sharpening the basic expressive and analytic tools indispensable to social and cultural understanding. All College students are expected to present, or to acquire, a knowledge of a second language (normally, French), necessary for their research and to write and to express themselves clearly. Training in research techniques is stressed, and original, independent work encouraged.

Liberal Arts College, linking demanding general education to significant specialization, is committed to serious intellectual work. Through its curriculum, staff, standards, and academic environment, it hopes to communicate the excitement and creativity of such engagement to its students.

Liberal Arts College Admission and Program Requirements

Students admitted to the University and seeking to enter the College must have a "B" average from Cegep, or its equivalent. All students upon admission must demonstrate proficiency in English composition and a second language, or undertake necessary make-up work.* All applicants should apply through the Office of the Registrar; they should also call or write the College for an interview. Mature students are admitted to the College on the basis of an interview and an examination of their record. Full-time degree candidates will normally complete their College core curriculum within three academic years; part-time degree candidates should complete their College core curriculum within six academic years. Students who have been admitted to departmental honours programs must maintain a "B+" average in their College core curriculum; all others must maintain a "C" average in their College core curriculum. All honours students in the College are expected to undertake significant original work, on a staff-guided basis, in their final year.

**Les étudiantes et étudiants francophones devront donner la preuve de leur connaissance de la langue anglaise.*

Students seeking admission to the honours program may apply either for direct entry on the University application form or, once in the program, to the College's honours advisor normally following the completion of 30 credits.

Staff

Faculty fellows chosen from the University's departments form the staff of all College courses, seminars, and tutorials. Teaching fellows are resident in the College, as is its Principal, who also teaches in the core curriculum.

Facilities

Liberal Arts College is located on Concordia University's downtown Sir George Williams Campus. Its seminar and tutorial teaching is done in the same building that houses the College's Principal and core fellows. The College has student study areas, a course-materials library, and audiovisual facilities, as well as common room and a collection of important newspapers, journals, and periodicals. The College, the focus of an extracurricular program of visiting speakers and cultural events, is a place where the exchange of ideas and views generated in courses and seminars continues on a more informal basis.

Counselling

Close student-faculty contact and exchange is part of the Liberal Arts College's stress on serious intellectual work. Each student is assigned to a faculty fellow who acts as a personal advisor, and who follows the student's progress through the College, advising on the choice of disciplinary or area specialization. All students' work is evaluated annually by the Principal and fellows.

College Council

Council, composed of fellows and students, is the formal decision-making body of Liberal Arts College. It meets regularly, chaired by the Principal, as a forum in which current issues and future policy are discussed and decisions taken. Council is that body which ensures the democratic participation of all members of the College in its ongoing academic and extracurricular work.

Programs

All Liberal Arts College students must take the core curriculum. These interrelated courses constitute a significant segment of the coursework required for College-sponsored BA programs. Liberal Arts College stresses honours-level work, although a student may, with the permission of the College, combine the core curriculum with a departmental specialization or major program, or with the Individual Studies programs.

42 Liberal Arts College — Core Curriculum

Stage I

18 LBCL 291⁶, 292⁶, 295⁶

Stage II

18 LBCL 390³ or 392³, 391⁶, 393⁶, 394³ or 395³

Stage III

6 LBCL 490⁶

In addition to completing the core curriculum, students must meet the Faculty of Arts and Science degree requirements and complete a departmental major, specialization, or honours program, or the Individual Studies program, or the Major in L.A.C. Western Society and Culture.

The core curriculum may also be applied towards specialization or honours work in the Individual Studies program. (See §31.170 of this Calendar).

All College students must consult with a College advisor before selecting courses in other disciplines or fields. Generally, courses in the Liberal Arts College are open only to members of the College.

Honours candidates must maintain a GPA of 3.30 (B+) in their College courses, with no grade lower than a "C." Students in a major or specialization program must maintain a "C" average in their College courses, with no grade lower than a "D."

60 BA Honours in Western Society and Culture

Stage I

18 LBCL 291⁶, 292⁶, 295⁶

Stage II

18 LBCL 390³ or 392³, 391⁶, 393⁶, 394³ or 395³

Stage III

12 LBCL 490⁶, 496⁶

6 Chosen from LBCL 494³, 495³, 498³

6 Chosen in consultation with the honours advisor

42 BA Major in Western Society and Culture

Stage I

18 LBCL 291⁶, 292⁶, 295⁶

Stage II

18 LBCL 390³ or 392³, 391⁶, 393⁶, 394³ or 395³

Stage III

6 LBCL 490⁶

30 Minor in Western Society and Culture

Stage I

18 LBCL 291⁶, 292⁶, 295⁶

Stage II

12 LBCL 391⁶, 393⁶

The College advises students who are enrolled in the BA Major in Western Society and Culture to take, in addition, some form of concentrated study (e.g. major, minor) within a single department or field of study.

Further information on core courses and College programs generally may be obtained either by writing for the Liberal Arts College Informational Brochure or by calling the Liberal Arts College. Personal interviews with a fellow of Liberal Arts College may be arranged through the secretary.

Admission into a departmental honours program requires the approval of the Department.
Admission into the College's honours program requires the approval of the College.

Students seeking admission to a departmental or College honours program will be bound by the honours requirements outlined in §16.2.3 of this Calendar.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LBCL 201 Great Books: Western History and Thought from Antiquity through the Renaissance (3 credits)
Social and political theory are central, and art, music, and scientific thought are represented. Key texts may include the *Bible*, Plato's *Republic*, Thucydides' *Peloponnesian Wars*, St. Augustine's *City of God*, and Machiavelli's *Prince and Discourses*.
NOTE: Students who have received credit for LBCL 291, 292, or LBCZ 201 may not take this course for credit.

LBCL 202 Great Books: Western Culture and Expression from Antiquity through the Renaissance (3 credits)
Literature, religion, and philosophy are central, and art and music are represented. Key texts may include Homer's *Odyssey*, Virgil's *Aeneid*, Montaigne's *Essays*, and Shakespeare's *King Lear*.
NOTE: Students who have received credit for LBCL 291, 292, or LBCZ 202 may not take this course for credit.

LBCL 203 Great Books: Western History and Thought from the Reformation through Modernity (3 credits)
Social and political theory are central, and art, music, and scientific thought are represented. Key texts may include Calvin's *Institutes*, Descartes' *Discourses on Method*, Hobbes' *Leviathan*, and Mill's *Essay on Liberty*.
NOTE: Students who have received credit for LBCL 291, 292, or LBCZ 203 may not take this course for credit.

LBCL 204 Great Books: Western Culture and Expression from the Reformation through Modernity (3 credits)
Literature, religion, and philosophy are central, and art and music are represented. Key texts may include Milton's *Paradise Lost*, Rousseau's *Confessions*, Stendhal's *The Red and the Black*, and Nietzsche's *Genealogy of Morals*.
NOTE: Students who have received credit for LBCL 291, 292, or LBCZ 204 may not take this course for credit.

LBCL 291 Structure and Dynamics of Western Civilization I (6 credits)
Prerequisite: Registration in the Liberal Arts College, or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the Biblical period and classical antiquity to the mid-17th century. Texts studied are related to changing social and historical contexts. Primary sources may include *Genesis*, Plato, *Republic*, Marcus Aurelius, *Meditations*, Thomas Aquinas, *Summa Theologica*, Machiavelli, *Prince and Discourses*, and Hobbes, *Leviathan*.

LBCL 292 Modes of Expression and Interpretation I (6 credits)
Prerequisite: Registration in the Liberal Arts College, or permission of the College. A study of major Western literary, religious, and philosophical traditions, involving the reading and interpretation of significant texts from antiquity to the mid-17th century. Emphasis is placed on development of writing skills and interpretative analysis. Primary texts may include Homer, *Odyssey*, Plato, *Symposium*, Augustine, *Confessions*, Dante, *The Divine Comedy*, and Cervantes, *Don Quixote*.

LBCL 295 History of Art (6 credits)
Prerequisite: Registration in the College, or permission of the College. This course is an integrated study of the nature of the visual arts from antiquity to the 20th century. Artistic expression is examined through chronological and thematic approaches, with attention to the relation between art and society.

LBCL 298 Liberal Arts College Selected Topics (3 credits)

LBCL 299 Liberal Arts College Selected Topics (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 390 History of Music: Ancient to Classical (3 credits)
Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course introduces developments in the history of European music from antiquity to the 18th century. Course content includes musical structure, period styles, and selected works by major composers, setting these within their historical contexts.
NOTE: Students who have received credit for LBCL 396 may not take this course for credit.

LBCL 391 *Structure and Dynamics of Western Civilization II* (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course emphasizes the intellectual, cultural, and political traditions from the mid-17th century to 1914. Texts studied are related to changing social and historical contexts. Primary texts may include Spinoza, *Theological Political Treatise*, Locke, *Second Treatise of Government*, Rousseau, *The Social Contract*, Wollstonecraft, *A Vindication of the Rights of Woman*, Marx, *Capital*, and Nietzsche, *Genealogy of Morals*.

LBCL 392 *History of Music: Classical to Contemporary* (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course introduces developments in the history of European music from the 18th century to the present day. Course content includes musical structure, period styles, and selected works by major composers, setting these within their historical contexts.

NOTE: Students who have received credit for LBCL 396 may not take this course for credit.

LBCL 393 *Modes of Expression and Interpretation II* (6 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. A study of major Western literary, religious and philosophical traditions from the mid-17th century to 1914. Primary texts may include Stendhal, *The Red and the Black*, Diderot, *Le neveu de Rameau*, Goethe, *Faust*, Nietzsche, *Thus Spoke Zarathustra*, and Baudelaire, *Les fleurs du mal*.

LBCL 394 *The History of Science: Antiquity to the Renaissance* (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course explores the history of science from antiquity to the Renaissance. Primary sources may include Aristotle, *Physics*, Plato, *Timaeus*, and Copernicus, *On the Revolution of the Heavenly Spheres*.

NOTE: Students who have received credit for LBCL 397 may not take this course for credit.

LBCL 395 *The History of Science: Early Modern to Contemporary* (3 credits)

Prerequisite: LBCL 291; LBCL 292; LBCL 295; or permission of the College. This course emphasizes the nature of modern science from the scientific revolution to the present day. Primary sources may include Darwin, *Origin of the Species*, Galileo, *Dialogue Concerning the Two Chief World Systems*, Bacon, *Advancement of Learning*, and Einstein, *Relativity*.

NOTE: Students who have received credit for LBCL 397 may not take this course for credit.

LBCL 398 *Liberal Arts College Selected Topics* (3 credits)

LBCL 399 *Liberal Arts College Selected Topics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LBCL 490 *The 20th Century: Forms, Themes, Critiques* (6 credits)

Prerequisite: LBCL 391; LBCL 393; or permission of the College. This course emphasizes key issues in contemporary society and culture. Major 20th-century texts and documents — philosophical, literary, political, and artistic, as well as analytical materials drawn from history and the social sciences, are read. Primary sources may include de Beauvoir, *The Second Sex*, Woolf, *To the Lighthouse*, Levi, *Survival in Auschwitz*, Hayek, *The Road to Serfdom*, Heidegger, *Being and Time*, as well as theorists such as Foucault, Lévi-Strauss, Barthes, and Derrida.

LBCL 491 *Integrative Seminar* (6 credits)

Prerequisite: Permission of the College. Students who have received credit for LBCL 490 may register for LBCL 491 provided the subject matter is different.

LBCL 494 *Liberal Arts College Special Studies: Antiquity to Renaissance/Reformation* (3 credits)

Prerequisite: Permission of the College. This course addresses a selected field within the chronological period above, emphasizing focused study of specific primary texts, as well as significant works of interpretation as appropriate to the selected field. Themes normally vary on a year-to-year alternating basis, so as to reflect the broad orientations (Structures and Dynamics of Western Civilization, Modes of Expression and Interpretation) which inform the core curriculum.

LBCL 495 *Liberal Arts College Special Studies: 17th Century to the Present* (3 credits)

Prerequisite: Permission of the College. This course addresses a selected field within the chronological period above, emphasizing focused study of specific primary texts, as well as significant works of interpretation as appropriate to the selected field. Themes normally vary on a year-to-year alternating basis, so as to reflect the broad orientations (Structures and Dynamics of Western Civilization, Modes of Expression and Interpretation) which inform the core curriculum.

LBCL 496 *Liberal Arts College Honours Essay Seminar* (6 credits)

Prerequisite: This course is open only to students at the College who have completed Stage II courses at the required academic level of performance. The student works with an individual faculty member in a chosen and approved area of the core curriculum, and must produce a sustained piece of written work approximately 40 pages in length. Students must also participate in an honours seminar in connection with their research and writing.

LBCL 498 *Liberal Arts College Advanced Topics* (3 credits)

LBCL 499 *Liberal Arts College Advanced Topics* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Principal

ROSEMARIE SCHADE, DPhil York (U.K.), Associate Professor, History

Fellows

ADEELA ARSHAD-AYAZ, PhD McG., Assistant Professor, Education

MATTHEW BARKER, PhD Wis.(Madison), Assistant Professor, Philosophy

WILLIAM BUKOWSKI, PhD Mich.State, Professor, Psychology

JAMES GRANT, PhD Guelph, Professor, Biology

DAVID HOWES, PhD Montr., Professor, Sociology and Anthropology

PK LANGSHAW, MFA U.Q.A.M., Associate Professor, Design and Computation Arts

JAMES MOORE, MA Tor., Distinguished Professor Emeritus, Political Science

ALAN E. NASH, PhD Camb., Associate Professor, Geography, Planning and Environment

KATJA NEVES-GRAÇA, PhD York (Can.), Associate Professor, Sociology and Anthropology

RAYMOND PAQUIN, DBA Boston, Assistant Professor, Management

DANIEL SALÉE, PhD Montr., Professor, Political Science/School of Community and Public Affairs

PETER STOETT, PhD Qu., Professor, Political Science

For the complete list of faculty members, please consult the Department website.

Location*Loyola Campus*

Administration Building, Room: AD 502

Tel.: 514-848-2424, ext. 2125

Email: loyolaic@alcor.concordia.ca

Objectives

Loyola College for Diversity and Sustainability is designed as a secular college that addresses the academic needs of selected undergraduate students who seek to balance discipline-based instruction with interdisciplinary and cross-disciplinary communication in the arts and sciences. The educational philosophy of the College incorporates several objectives: to integrate international and global perspectives into higher education; to foster understanding of how the individual and society can operate more effectively in a global context of increased intercultural interaction; to develop a literacy of sustainability; to provide the practical tools needed to tackle the major issues facing humanity; to balance discipline-based instruction with interdisciplinary inquiry and cross-disciplinary communication; and to promote responsible citizenship and leadership in the 21st century.

Admission Requirements for Loyola College for Diversity and Sustainability

Students may apply simultaneously to Concordia University and Loyola College for Diversity and Sustainability by selecting "Loyola College for Diversity and Sustainability" from the drop-down menu on the Program(s) tab of the Online Application.

Further information about the College can be obtained by telephone, email, or by visiting the College's offices.

All students registered in the Minor in Diversity and the Contemporary World and the Minor in Sustainability Studies are welcome to become members of the College if they successfully complete three LOYC courses. All other undergraduate students may also join the College if they successfully complete three LOYC courses.

Performance Requirement

Students must obtain a minimum grade of "B" in all courses counting towards their minor and/or membership in order to continue in the College.

Facilities

Loyola College for Diversity and Sustainability is located on Concordia University's Loyola Campus. The College has student study and lounge areas, a small library, and a conference room, to which all College members have access. The facilities are intended to complement Loyola College for Diversity and Sustainability's role as a community where students have the opportunity to pursue both their academic and extracurricular interests in a supportive and stimulating environment.

Programs

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

24 Minor in Diversity and the Contemporary World

- 15 Chosen from LOYC 210³, 220³, 230³, 310³, 320³, 330³, 340³
- 6 Chosen in consultation with a Loyola College for Diversity and Sustainability advisor
- 3 LOYC 420³

NOTE: The minor is designed for students to combine with an honours, specialization, or major in another discipline.

30 Minor in Sustainability Studies

- 6 BIOL 205³, LOYC 320³ to be taken in the first nine credits
- 9 Chosen from BIOL 226³; CHEM 209³; EXCI 233³; GEOG 203³; PHIL 236³; PHYS 270³; SCPA 215³
- 12 Chosen from AHSC 333³; ANTH/SOCI 352³; BIOL 353³; COMS 372³; ECON 391³; GEOG 321³; HIST 395³
- 3 POLI 394³

NOTE: Students are responsible for ensuring they have the necessary prerequisites for courses at the 300 level.

NOTE: Students must maintain a minimum grade of "B" in all courses taken toward the minor.

15-27 Foundation Year

- 6 LOYC 201³, 202³

*9-21 ANTH 272³; CHEM 209³; HIST 201³, 202³; POLI 205³; RELI 216³; THEO 233³

**Students must obtain permission from the Principal of the Loyola College for Diversity and Sustainability regarding course substitutions. Students who have received credit for these courses within their departmental program may not take these courses for credit toward their Loyola College for Diversity and Sustainability Foundation Year.*

NOTE: The foundation year is designed for students pursuing a 120-credit Extended Credit Program (ECP) in an undergraduate degree.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LOYC 201 The Idea of Modernity (3 credits)

The fundamental ideas and assumption of the modern Western world were formed in the 17th-century European Enlightenment. This course begins with an historical overview of the Enlightenment, followed by an interdisciplinary investigation of the idea of modernity. It focuses on the central modern concepts of a person, society, nature, and good and evil, and looks at some challenges to the idea of modernity. Finally, it explores current pressures that have led to the contemporary form of thought known as postmodernism.

LOYC 202 What is the Environment? (3 credits)

The purpose of this course is to explore the broad set of interdependent phenomena that comprise the environments in which people live. These are: a) the natural environment of rocks, air, water, plants, and animals; b) the built environment including characteristics of cities, workplaces, and homes; and c) the cultural environment including the beliefs, attitudes, and institutions that affect how people perceive and behave in the environment.

LOYC 210 The 20th Century (3 credits)

This course provides select coverage of aspects of the historical forces and events that shaped the 20th century. The historical background of issues such as wars and peace, colonialism and postcolonialism, economics and the environment, and questions about ethnic and national diversity and cultural perception are explored. The course is intended to develop critical thinking together with basic bibliographic and writing skills.

NOTE: Students who have received credit for HIST 283 or HISZ 283, or for this topic under an HIST 298 or HISZ 298 number, may not take this course for credit.

LOYC 220 The Contemporary World (3 credits)

From a variety of perspectives, including historical, environmental, economic, and cultural, this course examines major issues facing the world today. These issues may include international trade and the economy, the regulation of garbage and pollution, the decline in cultural variability, the spread and control of disease, and the effects of mass communication. This course is intended to develop an appreciation of a global view of the challenges which the world is likely to face in the next few decades.

LOYC 230 Globalization and Diversity (3 credits)

This course explores the main differences between the world's major cultures, religious beliefs, and philosophies, and addresses the tensions between establishing universal values and maintaining cultural diversity in an age of accelerating globalization. There is also an emphasis on the conception of different levels of social complexity, principally the role of the individual, the interpersonal, and the group within a society. This course is intended to develop team research and presentation skills, and the ability to communicate and work effectively within a small group setting.

LOYC 298 *Selected Topics in the Loyola College for Diversity and Sustainability* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LOYC 310 *Science and the Contemporary World* (3 credits)

This course explores the basic issues of the philosophy of science by examining the nature of science as an activity and a way of understanding the world. Cultural variations in the philosophy of science are discussed as well as contemporary disputes involving the interpretation of science: Darwinism; the "Science Wars"; science and religion; and feminist critiques of science. This course is intended to develop critical thinking and analysis, and deductive and inductive reasoning.

LOYC 320 *Biodiversity on Earth* (3 credits)

The current state of biodiversity around the world and the forces that affect this diversity are the main focus of this course. It addresses the origins of this diversity, the advantages of variability in the environment for human life, and the contemporary challenges to this diversity. This course is intended to emphasize holistic thinking and system analysis.

LOYC 330 *Self, Culture, and Development* (3 credits)

This course examines, from a psychological perspective, how the concept of self varies across cultures. Whereas some cultures embrace the concept of the individual, other cultures emphasize the communal nature of social and personal existence. This theme is explored from several perspectives including theory about development, the treatment of "self" in literature, cultural variations in the concept of human rights, and the link between self and society. This course is intended to demonstrate the interface between the medical and social sciences and the analysis of change.

LOYC 340 *Culture and Communication* (3 credits)

This course is an anthropological approach to variations in cultural experience as they relate to communication. Students explore modes of expression and communication, including literature and film, with a view to examining questions of interpretation, aesthetics, and ethical judgment. Personal expression and communication are also discussed. This course is intended to develop an awareness of the role of imagination and creativity in expression and interpretation, and sensitivity to the role of cultural and other differences in processes of communication.

NOTE: Students who have received credit for LOYC 410 may not take this course for credit.

LOYC 398 *Selected Topics in the Loyola College for Diversity and Sustainability* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

LOYC 420 *Integrative Seminar* (3 credits)

Prerequisite: 12 credits of LOYC courses; or permission of the College. This course focuses on the conceptualization of cross-disciplinary inquiry and the problems of interdisciplinary communication. The role of discipline-based and cross-disciplinary research is studied. A brief intellectual history of discipline-formation and emerging interdisciplinary fields is discussed. One contemporary global issue is usually examined in detail in this context. This course is intended as a seminar for students completing the Minor in Diversity and the Contemporary World.

Principal

MICHAEL KENNEALLY, PhD Tor., Professor

Professor

GEARÓID Ó HALLMHURÁIN, PhD Belf.

Assistant Professors

SUSAN CAHILL, PhD U.Coll.Dub.

GAVIN FOSTER, PhD Notre Dame

JANE G. V. MCGAUGHEY, PhD Lond.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Hall Building, Room: 1001

514-848-2424, ext. 8711

Objectives

The School of Canadian Irish Studies offers interdisciplinary programs in the history and culture of Ireland and Irish emigration and settlement, especially in Canada.

Courses in Irish history, literature, politics, language, ethnomusicology, film, theatre, economics, religion, women's studies and popular culture, introduce students to Ireland's rich culture and complex society. Because of the country's unique history, students are also introduced to issues pertinent in other regions of the world, such as colonization and post-colonialism, cultural nationalism, dual linguistic and religious traditions, famine and migration, rebellion and civil war, sectarian conflict and reconciliation, and economic development and globalization. Ireland therefore offers a case study relevant to other cultures and societies.

Students from diverse backgrounds and disciplines are attracted by the interdisciplinary and comparative programs of Canadian Irish Studies which prepare them either for graduate studies or to enter the work force in a wide range of fields from cultural production to media, public service to law, or education to international relations. With its own library and meeting room, the School creates an intimate and welcoming intellectual environment which is enhanced by a public lectures series as well as cultural and community events. Scholarships and opportunities to study in Ireland are available to students in the programs.

Programs

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

42 BA Major in Canadian Irish Studies

Stage I

- 12 HIST 211³; HIST 212³/IRST 210³; IRST 203³, 270³

Stage II

- 12 ENGL 357³; IRST 300³, 303³; ENGL 358³

Stage III

- 3 IRST 403³

- 15 Chosen from ENGL 353³, 355³, 356³, 359³; IRST 230³, 233⁶, 290³, 298³, 299⁶, 333⁶, 343³, 344³, 345³, 398³, 399⁶, 498³, 499⁶; IRST 205³ or HIST 213³; IRST 312³ or HIST 330³; IRST 314³, 315³, 316³, 371³, 373³, 412³; THEO 228³; WSDB 335³

24 Minor in Canadian Irish Studies

- 12 ENGL 357³; HIST/IRST 211³; IRST 203³, 270³

- 12 Chosen from ECON 379³; ENGL 355³, 359³; GEOG 342³; HIST 213³/IRST 205³; HIST 330³/IRST 312³; IRST 230³, 233⁶, 290³, 298³, 299⁶, 303³, 314³, 315³, 316³, 333⁶, 343³, 344³, 345³, 371³, 373³, 398³, 399⁶, 412³, 498³, 499⁶; MIRI 290⁶; THEO 228³; WSDB 335³; or other courses chosen in consultation with an advisor from the School of Canadian Irish Studies

30 Certificate in Canadian Irish Studies

15 ENGL 357³; HIST/IRST 211³; IRST 203³, 270³, 303³

15 Chosen from ECON 379³; ENGL 355³, 359³; GEOG 342³; HIST 213³/IRST 205³; HIST 330³/IRST 312³; IRST 230³, 233⁶, 290³, 298³, 299⁶, 312³, 314³, 315³, 316³, 333⁶, 343³, 344³, 345³, 371³, 373³, 398³, 399⁶, 412³, 498³, 499⁶; MIRI 290⁶; THEO 228³; WSDB 335³; or other courses chosen in consultation with an advisor from the School of Canadian Irish Studies

NOTE: For details on the course descriptions in the programs listed above, please refer to the individual departmental course listings, and the IRST courses listed below.

Courses

IRST 203 *Introduction to Canadian Irish Studies* (3 credits)

This course is a multidisciplinary introduction to the field of Canadian Irish studies, a discipline that embraces a broad range of historical and contemporary issues as they have manifested themselves on the island of Ireland and in Canada. In particular, questions related to individual identity in the context of history, language, culture, landscape, and religion are explored and debated.

NOTE: Students who have received credit for this topic under an INTE 298 number may not take this course for credit.

IRST 205 *(also listed as HIST 213)*

***The Irish in Montreal* (3 credits)**

Drawing on a diversity of historiographical materials, this interdisciplinary course examines the story of the Irish in Canada with a particular emphasis on Quebec, from the French colonial period through the City of Montreal's golden era of mercantile prominence in the mid-19th century to the break-up of its older Irish neighbourhoods a century afterwards. Starting with the demographics of Irish immigration and settlement, it devotes special attention to social and cultural relations between the Irish and other ethnic groups.

NOTE: Students who have received credit for HIST 213 or for this topic under a HIST 398 number may not take this course for credit.

IRST 210 *(also listed as HIST 212)*

***The Irish in Canada* (3 credits)**

From 17th-century fishermen and traders arriving in Newfoundland to displaced victims of the Famine in the 19th century, to contemporary immigrants from Ireland, the Irish have had a presence in all parts of Canada from the earliest days of settlement. This course examines the emigration and settlement patterns of Irish immigrants in the various regions of Canada across a period of three centuries, paying particular attention to their role in the social, economic, political, cultural, and educational development of Canadian society. The course explores the various strategies by which Irish immigrants both adapted to and transformed the particular host society in which they found themselves, and looks at other immigrant communities as a means of understanding the special contribution of the Irish to Canada.

NOTE: Students who have received credit for HIST 212 or for this topic under a HIST 398 number may not take this course for credit.

IRST 211 *(also listed as HIST 211)*

***History of Ireland* (3 credits)**

This survey course traces the history of Ireland from the earliest times to the present, with emphasis on the 19th and 20th centuries. Special attention is given to the development of Irish nationalism and relations with Great Britain.

NOTE: Students who have received credit for HIST 211 or for this topic under an IRST 298 number may not take this course for credit.

IRST 230 *Irish Mythology and Folklore* (3 credits)

This course explores Irish culture through folklore and myth — in particular, their manifestations in Irish music, literature, performing arts, and cinema. It addresses the significance of myth and folklore in written and oral history, traditions, and iconography. The course focuses on the forms, functions, and influences of Irish legends, myths, and folktales that attract learned and popular interest in Ireland and abroad.

IRST 233 *The Irish Language and its Culture I* (6 credits)

This course provides a general introduction to Irish linguistic and cultural practices in modern and contemporary Ireland. It explores the principles of the Irish language and introduces students to the language through folklore, song, poetry, film, drama, and storytelling.

NOTE: Students who have received credit for MIRI 290 may not take this course for credit.

IRST 270 *Irish Traditional Music: A Global Soundscape* (3 credits)

Covering a tapestry of cultural history from the ancient Celts to modern mega shows like *Riverdance*, this multidisciplinary course focuses on Irish traditional music performed in Ireland, as well as throughout the world. Drawing on historiographical and ethnomusicological theory, the course uses recordings and documentary films to explore how globalization has interfaced with this traditional genre to create a thriving transnational arena of performance and creativity.

IRST 290 *Field Studies in Ireland* (3 credits)

Prerequisite: Permission of the School. Prerequisites are determined on an individual basis by the School. This course is designed to allow students to conduct focused study of a given subject (e.g. literature, history, language, music, film) in an Irish context. The experience in Ireland may be in the context of a structured school environment or may take the form of a more independent exploration. Based upon preparatory readings and assignments done at Concordia, students enrich their learning experience in

Ireland, followed by assignments completed upon their return to Concordia. All course content and requirements are established in consultation with the School.

NOTE: Students may take this course two times for credit provided the subject matter is different.

IRST 298 *Selected Topics in Canadian Irish Studies* (3 credits)

IRST 299 *Selected Topics in Canadian Irish Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

IRST 300 *Research Methods in Irish Studies* (3 credits)

Irish Studies span a spectrum of disciplines from the humanities, fine arts and the social and political sciences. Conducting research within this diverse domain requires a broad-based set of applied and theoretical skills. This interdisciplinary course prepares upper-level undergraduates for research in Irish studies, for academic and field situations in Ireland, and in Irish diasporic settings overseas. While cross-disciplinary methodologies are emphasized throughout the course, particular attention is given to research planning and logistics, archival investigation, cross-cultural interviewing, "participant observation" fieldwork training, applied theoretical modelling, and thesis management.

IRST 303 *Irish Studies: Dispersal and Settlement* (3 credits)

Prerequisite: IRST 203. This interdisciplinary course examines the Irish experience of emigration, exile, resettlement, and diaspora, emphasizing the Great Famine and its legacy in shaping Irish communities in Canada and elsewhere. It highlights debates about the impact of the Famine, the significance of Grosse-Île in Irish and Irish-Canadian cultural memory, the relationship between Irish emigration and nationalism, immigrant women and how Irish communities adopted a self-image of exile.

IRST 312 *(also listed as HIST 330)*

***The Great Irish Famine* (3 credits)**

Prerequisite: 24 credits. This course examines the Irish Famine and its impact on Irish society, culture, and history. Beginning with a thorough examination of the economic, political, and social structures in pre-Famine Ireland, the course studies the causes of, and responses to, the Famine and its impact on society in Ireland and the world, including Quebec. Consideration is also given to the continuing re-examination of the Famine and its role in the politics of memory.

NOTE: Students who have received credit for HIST 330 or for this topic under a HIST 398 number may not take this course for credit.

IRST 314 *Ireland in the 20th Century* (3 credits)

This course surveys Irish political and social developments during the last century. Key themes include the struggle for independence from Britain, Anglo-Irish relations after independence, Partition and the Northern Irish "Troubles," and the emergence of a globalized and more prosperous Ireland.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

IRST 315 *The Troubles in Northern Ireland* (3 credits)

Prerequisite: IRST 314. After surveying the historical roots of the divisions in Northern Irish society, the course traces the successive phases of the prolonged "Troubles" (1968 to 1998): the Catholic civil rights movement; the period of armed conflict between the IRA, loyalist paramilitaries, and security forces; and the recent peace process. The course also considers the impact of the Troubles on Ireland (North and South) and Britain.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

IRST 316 *The Irish Revolution, 1913-1923* (3 credits)

Prerequisite: IRST 314. This course explores the political, military, social, and cultural dimensions of the turbulent period in Irish history that dissolved over a century of Anglo-Irish Union and established two new states. The course necessarily focuses on *Sinn Féin* and the Irish Republican Army's efforts to achieve independence from Britain, but considerable attention is also given to Ulster Unionist resistance to separatism. Additionally, other forces and dynamics that shaped this seminal period are explored, such as sectarian violence in Northern Ireland; conflict between rival nationalist factions in the south; labour and socialist agitations; agrarian discontents; and the women's suffrage and feminist movements.

NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

IRST 333 *The Irish Language and its Culture II* (6 credits)

Prerequisite: IRST 233; MIRI 290; or permission of the School. Under pressure for over 200 years from the expanding use of English, Irish is still considered by many a crucial underpinning of Irish national identity. This course assumes elementary knowledge of the Irish language as a platform for students to access cultural forms (memoirs, poetry, short stories, sean-nós songs, films) and media such as radio, newspapers, television, and podcasts. In particular, the course examines how language is intimately tied to place and landscape (*dinnshenchas*: the Irish lore of place names) and how it both actively and subliminally remains a potent force in Irish cultural life.

NOTE: Students who have received credit for this topic under an IRST 399 number may not take this course for credit.

IRST 343 *Cinema in Quebec and Ireland* (3 credits)

This course offers a comparative study of Quebec and Ireland's cinema. As cultures, Quebec and Ireland share a history of Catholicism, a relationship with British colonialism, anxiety around language, and unresolved debates about nationalism and state formation. But these points of contact are problematic. This course teases out the complexities and importance of some of these points of contact and divergence so as to engage, in a fully realized way, in a comparative analysis.

IRST 344 *Irish Plays: Dramaturgy* (3 credits)

This lecture/seminar course examines selected Irish plays, covering the background research necessary for their deeper contextual understanding — geography, politics, society, economy, class, history, religion, and moral values of the time and place. In addition to attending lectures and having the option to participate in play readings, students are expected to undertake research assignments in the above fields, to contribute to the creation of dramaturgical folders, and to participate in group presentations.

IRST 345 *Irish Plays: Performance* (3 credits)

This acting class in applied dramaturgy undertakes in-depth scene study of play extracts. There is an option for students to act as dramaturg(e)s and assistant directors to the scene study groups; that is, to have non-performing roles in the class. The students undertake extended dramaturgical analyses of plays, characters, and scenes, as well as learning the appropriate accents.

IRST 371 *Irish Cultural Traditions in Quebec* (3 credits)

Music, song, and dance have consistently acted as conduits for the integration of the Irish immigrants into Québécois society. This interdisciplinary course explores the history of Irish traditional music in Quebec since the 18th century. Using archive recordings, ballads, and dance music, the course traces the history of Irish settlement in Quebec, and focuses specifically on the diaspora of Irish music makers to the province. In exploring this eclectic soundscape, particular emphasis is given to Irish music communities in rural and urban Quebec, from the Gaspé through Quebec City and Montreal, to the Gatineau and Ottawa Valleys.
NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

IRST 373 *Irish Traditional Music in Canada: A Cultural History* (3 credits)

The cultural history of Irish traditional music in Canada is inextricably linked to a matrix of Irish immigration and settlement that began in the late 1600s and that stretched from Newfoundland to the Yukon, from Hudson Bay to the Great Lakes, evidenced in music played by Irish, French, Scottish, and First Nation communities across Canada today. Exploring the music history of the Irish in the Atlantic provinces, Lower and Upper Canada, and the Western provinces, this course draws on analytical models in history, anthropology, and cultural studies, as well as ethnomusicology and music criticism.
NOTE: Students who have received credit for this topic under a HIST 398 number may not take this course for credit.

IRST 398 *Special Topics in Canadian Irish Studies* (3 credits)

IRST 399 *Special Topics in Canadian Irish Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

IRST 403 *Irish Studies: Diasporic Transformation and Integration* (3 credits)

Prerequisite: IRT 303. This course examines the adaptation and integration of Irish communities into various host societies, with a particular emphasis on the Irish in Quebec and Canada. The course looks at the role which such communities played in shaping the social, cultural, political, economic, educational, and religious fabric of these host societies.

IRST 412 *Rebellion in Ireland and Quebec* (3 credits)

This seminar explores, from a variety of angles, two rebellions that marked the histories of Ireland and Quebec. The Irish Rising of 1798 and the Rebellions of 1837-8 in Lower Canada both pitted various sectors in society against one another. Students read broadly about the two rebellions, considering both their similarities and differences, reflecting on the different ways that historians have written about them, and exploring their place in the public memory of the two societies.
NOTE: Students who have received credit for this topic under a HIST 398 or 412 number may not take this course for credit.

IRST 498 *Advanced Topics in Canadian Irish Studies* (3 credits)

IRST 499 *Advanced Topics in Canadian Irish Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Interim Principal

DANIEL SALÉE, PhD Montr., Professor

Vice-Principal

MARGUERITE MENDELL, PhD McG., Professor

Associate Professors

KARL HELE, PhD McG.

ANNA KRUYNSKI, PhD McG.

Assistant Professor

LOUELLYN WHITE, PhD Ariz.

Fellows

WILLIAM BUXTON, PhD Berlin, Professor, Communication Studies

MIKE GASHER, PhD C'dia., Professor, Journalism

CHANTAL MAILLÉ, PhD U.Q.A.M., Associate Professor, Simone de Beauvoir Institute

ALAN E. NASH, PhD Camb., Associate Professor, Geography, Planning and Environment

LORNA ROTH, PhD C'dia., Professor, Communication Studies

FILIPPO SALVATORE, PhD Harv., Associate Professor, Classics, Modern Languages and Linguistics

JOHN ZACHARIAS, PhD Montr., Professor, Geography, Planning and Environment

Associate Fellow

MARVIN HERSHORN, MA Wat., Lecturer, Political Science

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex CI, Room: 101

514-848-2424, ext. 2575

Objectives

The School of Community and Public Affairs (SCPA) offers a multidisciplinary program in public policy analysis. The School prepares its graduates to be knowledgeable participants in the policy-making process in the private, public, and community sectors.

An innovative combination of academic and practical training exposes students to a wide range of public issues. In small classes encouraging participation, students develop specialized abilities to do research, to communicate, and to organize public consultations and debates. An internship program also enables students to gain the necessary experience of working in a public affairs job.

The School will be of interest to excellent students in a variety of disciplines, including economics, history, political science, sociology, urban studies, journalism, and communication studies. While some of our students enter the work force upon completion of their undergraduate degree, the majority continue their education. SCPA graduates tend to do graduate work either in their disciplines or, more often, in professionally oriented programs including public or business administration, international affairs, industrial relations, and law.

The historic Mackay Street building which the School occupies is an ideal site for small classes, public lectures, social events, and meetings. School facilities include a common room, a reading room and documentation centre, a seminar room, a computer room, and faculty and student offices.

Program

Students who enrol in the School of Community and Public Affairs must follow, in sequence, a three-stage program comprised of the following courses:

- 42 BA Major in Community, Public Affairs and Policy Studies**
 - Stage I*
 - 12 SCPA 201³, 203³, 215³; INTE 296³
 - 3 Chosen from SCPA 204³/POLI 204³ or SCPA 339³/POLI 339³
 - 3 Chosen from SCPA 205³/HIST 205³ or SCPA 210³/HIST 210³

- Stage II
 12 SCPA 301⁶, 321³, 352³
 Stage III
 9 SCPA 411³, 412³, 450³
 3 Chosen from SCPA 460³/COMS 460³; SCPA 461³/COMS 361³; SCPA 465³/COMS 465³

The Disciplinary Program

Students enrolled in the SCPA major program are strongly encouraged to combine the School's major program with a departmental major, specialization, or honours program, and meet the Faculty of Arts and Science degree requirements.

Performance Requirements

Students are required to maintain an average of "B-" in program courses.

Entrance Requirements

Students admitted to the University and seeking to enter the School must have achieved a "B" average, or the equivalent at the previous educational level. Students wishing to enter the School will be interviewed personally and asked to complete a writing test. The interview process also serves to evaluate their language skills in both English and French. In exceptional circumstances, a candidate who has failed to meet the grade requirements might be admitted on the basis of a personal assessment of potential capacities.

For further information on curriculum, programs, personnel, and objectives, please call 514-848-2424, ext. 2579.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCPA 201 **Introduction to Public Policy and the Public Interest** (3 credits)

This course introduces students to the theoretical, philosophical, and ethical foundations as well as the social logic of public policy formulation in modern societies. Using a multidisciplinary approach, it pays particular attention to the complex interaction between groups, individuals, and institutions in society, and brings students to consider issues related to the nature of the modern state, business-government relations, the labour movement, non-profit and community organizations, the influence of interest groups, media and international institutions on the policy agenda.

NOTE: Students who have received credit for SCPA 300 or SCPZ 201 may not take this course for credit.

SCPA 203 **Community and Public Affairs in Quebec and Canada** (3 credits)

This course examines the interaction between civil society organizations and the state in the particular context of Quebec and Canada. It focuses on the labour movement, social movements and interest groups, and analyzes their role and influence in the policy-making process in Quebec and Canada, especially with regard to social policy, socio-economic development and human rights.

NOTE: This course is taught in French.

NOTE: Students who have received credit for SCPA 300 may not take this course for credit.

SCPA 204 **(also listed as POLI 204)**

Introduction to Canadian Politics (3 credits)

This course is a basic introduction to the fundamental issues of Canadian public life and the federal political system. It presents an overview of the constitution, institutions, political parties, electoral system, interest groups, and public opinion that represent the essential components of Canada's political culture and government.

NOTE: Students required to take this course under Political Science as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 205 **(also listed as HIST 205)**

History of Canada, Post-Confederation (3 credits)

A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

NOTE: Students required to take this course under History as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 210 **(also listed as HIST 210)**

Quebec since Confederation (3 credits)

A survey of the history of Quebec from the time of Confederation until the present. While due emphasis is placed on political developments in the province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Quebec.

NOTE: Students required to take this course under History as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 215 **Economics for Public Policy and Community Development** (3 credits)

Based on an overview of current economic issues, this course introduces students to the fundamental analytical tools and concepts that are necessary to understand economic public policy and relevant to community development and empowerment.

NOTE: Students who have received credit for SCPZ 215 may not take this course for credit.

SCPA 298 **Selected Topics in Community and Public Affairs** (3 credits)

SCPA 299 **Selected Topics in Community and Public Affairs** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCPA 301 **Social Debates and Issues in Public Affairs and Public Policy** (6 credits)

Prerequisite: Successful completion of Stage I. This course emphasizes a deeper understanding of the process by which public policies are developed, implemented, and advocated, and of the role played by various institutions or groups in this process. Each year, a new set of key policy issues is selected for discussion and analysis. Students work in teams and are required to do case studies of institutions or groups relevant to the policy or public affairs issue they have chosen. The focus is on developing both communication skills, through oral and written presentations, and organizational skills as each team must organize one public panel discussion on one of the selected issues. The course takes place over the fall and winter terms.

NOTE: Students who have received credit for SCPA 401 may not take this course for credit.

SCPA 321 **Public Affairs Strategies** (3 credits)

Prerequisite: Successful completion of Stage I or permission of the School. This course examines and analyzes the ways in which corporate, public, and community organizations anticipate, monitor, and manage their relations with the social, political, and environmental forces which shape their operations and influence their action in their respective field. It familiarizes students with the strategies most often used in public affairs management, and develops the skills required for effective results.

SCPA 339 **(also listed as POLI 339)**

Quebec Politics and Society/La vie politique québécoise (3 credits)

This course is a study of the changing party structure and political issues in Quebec and their relationship to constitutional, cultural, and economic factors.

On étudiera dans ce cours l'évolution structurelle des partis et des questions politiques au Québec en fonction de facteurs d'ordre constitutionnel, culturel et économique.

NOTE: Students required to take this course under Political Science as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

NOTE: The course will be offered in both English and French on a rotational basis. Please consult the Undergraduate Class Schedule for details.

NOTE: Students who have received credit for POLI 211, POLI 339 or SCPA 211 may not take this course for credit.

SCPA 352 **Community and Local Activism** (3 credits)

The goal of this course is to share, study, and debate dimensions of community and local activism. It critically examines traditions and histories of a variety of perspectives and presents current examples of local and community activism.

NOTE: Students who have received credit for ANTH 353 or SCPA 353 or SOCI 353, or for this topic under a SCPA 398 number, may not take this course for credit.

SCPA 398 **Special Area Study in Community and Public Affairs** (3 credits)

Prerequisite: Successful completion of Stage I. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCPA 411 **Internship** (3 credits)

Prerequisite: Successful completion of Stages I and II. An essential part of the School's program is a one-term apprenticeship in some aspect of community and public affairs. After completing 60 credits of the BA program, including Stages I and II, students are required to complete a practicum that will allow them to test their skills in a real situation. Placements may be drawn from all areas of possible employment, including the private sector, government and community service organizations. Students are expected to participate fully in finding and defining possible internships. Employers are asked to join in an evaluation of the work period. Students are required to submit a written report which summarizes and evaluates their work experience.

SCPA 412 **Senior Research Seminar** (3 credits)

Prerequisite: Successful completion of Stages I and II. In this course, students work in groups and are required to play out the position of a given corporate, public, or community organization in a simulation of real-life interaction between social and political actors over a particular policy issue. To this end, they must research and prepare all the necessary material (such as briefs, position papers, press kits) that will allow them to defend and make their policy position known. The actual simulation takes place in a one-day event at the end of the term.

SCPA 450 **Neo-Liberal Globalization and the Global Justice Movement** (3 credits)

This course, by examining global justice movements in the context of neo-liberal globalization, focuses on social movements, public policy and community.

NOTE: Student who have received credit for this topic under a SCPA 498 number may not take this course for credit.

SCPA 460 **(also listed as COMS 460)**

Political Communication (3 credits)

Prerequisite: Successful completion of Stages I and II. The relationships between media institutions and political institutions, both

in Canada and internationally, are examined. Issues such as the flow of political information; the social and political construction of news; the politics of regulation; the politics of influence in campaigns, nation-building socialization through media; ideology in the media, and alternatives to traditional media are explored.

NOTE: Students required to take this course under Communication Studies as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 461 (also listed as COMS 361)
Propaganda (3 credits)

Prerequisite: Successful completion of Stages I and II. The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with it. Course methodology includes lectures, discussions, and projects.

NOTE: Students required to take this course under Communication Studies as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 465 (also listed as COMS 465)
Rhetoric and Communication (3 credits)

Prerequisite: Successful completion of Stages I and II. This course focuses upon communication as persuasive or as producing identification. Emphasis is placed upon the role of communication in civic affairs. Classical and contemporary approaches to rhetorical theory and criticism are examined.

NOTE: Students required to take this course under Communication Studies as part of a major or specialization in that discipline must replace the credits with a course chosen in consultation with the SCPA advisor.

SCPA 498 Special Topics in Community, Public Affairs and Policy Studies (3 credits)

Prerequisite: Successful completion of Stages I and II. This course provides focused, in-depth examination and analysis of a particular policy topic, public affairs issue, or problem of community development. The subject of inquiry changes every year.

Program Objectives

The First Peoples Studies program is a major designed to introduce the student to the world of First Peoples (First Nations, Inuit, and Métis), specifically within the Quebec context. It investigates the history, the current situation, and the changing needs of First Peoples. Taught from First Peoples perspectives and based on sound, culturally sensitive research, the program's aim is to bring accurate awareness and a better understanding of First Peoples issues, develop further understanding of society's standing in relation to First Peoples, and build bridges towards mutual understanding between Quebec society and First Peoples. Students are encouraged, though not required, to take either a minor in another area of study, or a second major in order to facilitate the acquisition of complementary knowledge and practical skills relevant to contributing to the well-being and advancement of First Peoples.

Program

42 BA Major in First Peoples Studies*

Stage I

9 FPST 201³, 202³, 203³

6 Chosen from FPST 210³, 211³, 212³, 298³

Stage II

9 FPST 301³, 302³, 303³

6 Chosen from FPST 310³, 311³, 312³, 320³, 321³, 322³, 323³, 398³; RELI 368³; WSDB 381³

Stage III

6 FPST 401³, 402³

6 Chosen from FPST 410³, 411³, 412³, 413³, 414³, 415³, 490³, 491³; COMS 419³

**Subject to MESRST approval.*

24 Minor in First Peoples Studies

12 FPST 201³, 202³, 203³, 301³

3 Chosen from FPST 210³, 211³, 212³

3 Chosen from FPST 310³, 311³, 312³

3 Chosen from FPST 302³, 303³, 320³, 321³, 322³, 323³

3 Chosen from FPST 401³, 402³, 411³, 412³, 413³, 414³, 415³, 490³, 491³

Courses

FPST 201 Introduction to First Peoples Studies (3 credits)

This course introduces the guiding concepts central to First Peoples Studies at Concordia. These guiding concepts are often misunderstood by mainstream society. Themes include the Medicine Wheel as a structuring approach to course content and teaching/learning; worldviews; colonization and decolonization; First Peoples thought and knowledge; the diversity among First Peoples; and individual and community empowerment within First Peoples frames of reference. Principles and practices of dialogue and cross-cultural communication are introduced. A key process goal of the course is for students to explore, with increasing skill and knowledge, their own motivations, positioning, and goals in relation to pursuing First Peoples Studies.

FPST 202 *Research Strategies in First Peoples Studies* (3 credits)

This course introduces basic concepts, practices, and issues for study and research consistent with the goals of First Peoples Studies, including the historical relation of First Peoples to academic research; ethical considerations; the social construction of knowledge, the influence of First Peoples thought, knowledge, and ways of knowing on the development of relevant contemporary research; basic steps of designing, carrying out, and presenting research within several contemporary models, including participatory research; constructive relations of people of other cultures to researching in the area; qualitative and quantitative research methods, including asking research questions; and basic skills of interviewing, as well as treating, analyzing and presenting interview data, within qualitative research.

FPST 203 *First Peoples of Canada* (3 credits)

This course provides an introductory overview of knowledge related to the eleven cultural groups of First Peoples in Canada. It explores theories of migration, geographic location, cultural and linguistic diversity, historical socio-economic and political systems as well as the relationships with the environment and traditional practices and beliefs. In-depth focus is placed on representative nations within each group.

FPST 210 *Haudenosaunee Peoples* (3 credits)

This course traces the history of the Haudenosaunee (Iroquois) from the period of the founding of the Confederacy to the present. With particular focus on the Kanien'kehaka (Mohawk) of Quebec, it includes discussion on the culture, language, and structure of Haudenosaunee society, the formation of the Haudenosaunee Confederacy, traditional philosophies such as the Kaienerekowa (Great Law of Peace) and the Code of Handsome Lake, Kanonsesro:non (people who adhere to the ways of the Longhouse), symbolism, as well as contemporary issues, including the impact of Euro-Canadian government policies.

FPST 211 *Algonquian Peoples* (3 credits)

This course explores the specific cultures of the Algonquian peoples of Canada with an emphasis on the peoples of Quebec (the Abenaki, the Algonquin, the Attikamek, the Cree, the Innu, the Malecite, the Mik'maq, and the Naskapi) and in particular the Eeyouch (the Cree Nations). From a historical perspective and using a sociological approach, this course examines social and political structures, gender-defined roles, relationship with the environment, as well as spirituality and language. This course also examines changing roles and structures influenced by colonization, including the imposition of federal policies.

FPST 212 *Inuit Peoples* (3 credits)

This course explores the specific cultures of the Inuit peoples in Canada with a particular emphasis on the Inuit people of Nunavik (Northern Quebec). The course examines social and political structures, gender-defined roles, the Arctic way of life, the Inuit language and its dialects, as well as the spiritual beliefs of the Inuit. This course also examines changing roles and structures influenced by colonization, including the imposition of federal policies.

FPST 298 *Selected Topics in First Peoples Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

FPST 301 *The Indian Act* (3 credits)

Prerequisite: FPST 201, 202. This course focuses on the Indian Act, with an emphasis on its impact on the First Peoples of Quebec. This includes discussion of the events leading up to its imposition, its implications for First Peoples cultures and societies, as well as related policies and other instruments of assimilation and colonization. Issues of accommodation and resistance are discussed. Effects of proposed changes to the Indian Act are analyzed and alternative solutions are explored.

FPST 302 *First Peoples and Education* (3 credits)

Prerequisite: FPST 201, 202. This course traces the history of the education of the First Peoples. It explores current issues in education, including educational approaches defined and implemented by First Peoples. Topics covered include traditional ways of learning and teaching. The issue of colonization, including early attempts at religious and linguistic conversion, as well as Canada's residential school system and its continuing legacy, are discussed in depth.

FPST 303 *First Peoples and Health* (3 credits)

Prerequisite: FPST 201, 202. This course addresses First Peoples wellness philosophies and healing approaches in dealing with contemporary health problems. It draws significantly on historical perspectives of First Peoples mental, physical, spiritual, and emotional health issues, including pre-contact health and environments, the introduction of alcohol and viral disease, as well as the emergence of lifestyle-related diseases. Some of the current health issues to be explored include structural inequalities, institutional mistreatment, addictions, diabetes, HIV/AIDS, and mental health.

FPST 310 *Linguistic Introduction to Algonquian Languages* (3 credits)

This course presents a general overview of the eight Algonquian languages spoken in Quebec, with special emphasis on the Cree language. The course introduces the student to basic vocabulary, different dialects and writing systems. It explores the basic components that make up Algonquian languages, including sounds, word composition, sentence structure and meaning. Other topics include linguistic interference from dominant languages, semantic shift and the use of language as a social tool. This course assists the student to recognize and value the social and cultural context of language.

FPST 311 *Linguistic Introduction to Haudenosaunee Languages* (3 credits)

This course presents a general overview of the six Haudenosaunee (Iroquoian) languages, with special emphasis on Kanien'kehaka (the Mohawk language). The course introduces the student to basic vocabulary, different dialects and writing systems. It explores

the basic components that make up Haudenosaunee languages including sounds, word composition, sentence structure and meaning. Other topics include linguistic interference from dominant languages. This course assists the student to recognize and value the social and cultural context of language.

FPST 312 *Linguistic Introduction to Inuktitut Language* (3 credits)

This course presents a general overview of the Inuktitut language, with special emphasis on the dialect spoken in Nunavik (Northern Quebec). The course introduces the student to basic vocabulary, different dialects, and the syllabic writing system used by Inuit people. It explores the basic components that make up Inuktitut, including sounds, word composition, sentence structure and meaning. Other topics include linguistic interference from dominant languages. This course assists the student to recognize and value the social and cultural context of language.

FPST 320 *First Peoples and the Media* (3 credits)

This course explores how First Peoples have been portrayed in selected media such as television, film, and advertising by looking at different representations in various industries such as advertising, sports, and tourism. This includes discussion on the relationship between media and First Peoples including the media's impact on relations between the mainstream society and First Peoples. The social role of different forms of media as used by First Peoples in the process of empowerment is also discussed.

FPST 321 *First Peoples and Justice* (3 credits)

Prerequisite: FPST 301. This course focuses on the relationship between First Peoples and the Canadian justice system. It looks specifically at how the Canadian legal, judicial, and penal system has dealt with First Peoples through time. The course also explores pre-contact forms of justice, tensions between European and indigenous conceptions of justice, First Peoples response to Canadian justice, and the emergence of alternative, indigenous mechanisms of judicial administration within communities in Quebec and Canada.

FPST 322 *First Peoples and the Fur Trade* (3 credits)

This course provides an in-depth historical and sociological analysis of the impact of the fur trade on the First Peoples of Canada. Topics include the emergence of the fur trade, and fur-trading companies' dependence on First Peoples. Special emphasis is placed on changing demographics as a result of the fur trade, the increasing reliance on European goods, First Peoples entrepreneurial spirit, the birth of the Métis Nation, as well as the evolving political and economic role of women within fur-trading society.

FPST 323 *First Peoples Sacred Stories* (3 credits)

Prerequisite: FPST 201 or 203. Through storytelling, reading, discussion, and writing, this course explores themes of fundamental human concern for First Peoples. It considers oral traditions as integral to broader, culturally defined systems of knowledge and explores the role of sacred stories in traditional and contemporary societies. This includes discussion on the role of stories as vehicles for encoding and transmitting knowledge about the people, the environment, the culture and history. Stories analyzed include creation stories, trickster tales, oral historical accounts, and stories relating to natural phenomena.

FPST 398 *Special Topics in First Peoples Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

FPST 401 *Contemporary Politics in First Peoples Communities* (3 credits)

Prerequisite: FPST 301. This course focuses on First Peoples politics in the Quebec and Canadian contexts. It explores more specifically the emergence and actions of First Peoples political organizations over the past 40 years, First Peoples relationships with successive federal and provincial governments, movements of national self-affirmation, and the nature of the political interface between competing groups inside First Peoples communities.

FPST 402 *First Peoples Contemporary Social Issues* (3 credits)

Prerequisite: FPST 302, 303. This course addresses contemporary social issues and challenges faced by First Peoples. It analyzes the underlying causes of issues such as poverty, lack of formal education, isolation, alcohol and substance abuse, family violence and sexual abuse. The course also examines current healing approaches and programs used to deal with these issues, and fosters discussion on possible alternatives.

FPST 410 *First Peoples Community Development* (3 credits)

Prerequisite: FPST 401 previously or concurrently. This course examines the concepts and experiences of community development among First Peoples, with an emphasis on Quebec. Selected community development models, their goals, processes, and means of evaluation, are analyzed. The course introduces students to analytical and practical skills in context-sensitive community development guided by First Peoples thought and knowledge. Students explore dynamics of nourishing community participation and leadership, as well as analyze community structures and inter-group relations within communities. Reference is made to on-reserve, urban, rural, and northern contexts. Ethical considerations are discussed. This course includes analysis of case studies.

FPST 411 *First Peoples Treaties and Agreements* (3 credits)

Prerequisite: FPST 401 previously or concurrently. This course explores the contemporary issues associated with treaties and indigenous land claims agreements. Emphasis is placed on selected historically significant treaties between the First Peoples, and those between the First Peoples and the Europeans. The original intent and framework of treaties and agreements, the negotiation processes involved, and the implementation of treaties and modern agreements are also discussed.

FPST 412 *First Peoples and Governance* (3 credits)

Prerequisite: FPST 401 previously or concurrently. This course examines the political and administrative mechanisms which First Peoples use to arbitrate competing interests, manage conflict, and formulate policies in their communities across Quebec and Canada. The course analyzes political and administrative institutions inherited from the Indian Act, as well as governance strategies developed in conformity with First Peoples traditions and in resistance to the Canadian state's institutional dominion. The course also explores the tensions created by the coexistence of European and indigenous modes of governance within and outside First Peoples communities.

FPST 413 *First Peoples International Relations and Diplomacy* (3 credits)

Prerequisite: FPST 321. This course focuses on the actions and interventions of various First Peoples on the international scene, both in the past and in the present. The course's primary aim is to explore the reasons why First Peoples have resorted to international forums and institutions, how they conduct their international action and whether in the end international diplomacy works to their advantage.

FPST 414 *First Peoples Rights Movements* (3 credits)

Prerequisite: FPST 401 and 402, previously or concurrently. This course focuses on the many historical and contemporary forms of First Peoples resistance to colonization, including violent and non-violent resistance, revitalization movements and self-determination. It explores liberation theory and its roots in colonial oppression and analyzes historical and contemporary resistance movements such as the confrontation at Kanehsatake (Oka) and Esgenooetitj (Burnt Church) and the movement for decolonization through self-determination.

FPST 415 *Indigenous Identity and Nationalism* (3 credits)

Prerequisite: FPST 401 previously or concurrently. This course explores the political and ideological ramifications of the expression of indigenous identity. It focuses on the emergence of First Peoples nationalist movements, compares them with non-Aboriginal nationalisms, and examines the nature and conceptual foundations of the indigenous sense of nation. Attention is devoted to the political efficiency of indigenous nationalism in its interface with the Canadian and Quebec states. Case studies particularly emphasize Kanien'kehaka and Eeyou nationalisms.

FPST 490 *Aboriginal Community Economic Development I* (3 credits)

Prerequisite: Enrolment in the major; 60 credits and permission of the School. This course assists participants in exploring specific issues related to Aboriginal economic development in particular settings (in reserve, urban, rural, and northern communities), as well as addressing challenges common to Aboriginal CED. It assists participants in exploring historical and contemporary relationships between Aboriginal communities and the predominant cultural and economic forces, and comparing traditional Aboriginal organizational and economic practices with the new approaches being proposed by CED.

FPST 491 *Aboriginal Community Economic Development II* (3 credits)

Prerequisite: FPST 490. This course uses a case study approach to evaluate one or more economic development strategies applied within an Aboriginal community. An historical overview of this experience outlines the cultural and political context which has shaped these strategies as well as their results. CED approaches are examined in the context of this individual experience. This course may include on-site visits and guest lecturers.

FPST 498 *Advanced Topics in First Peoples Studies* (3 credits)

Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

31.550

SCIENCE COLLEGE

Principal

CALVIN S. KALMAN, PhD *Roch.*, *Provost's Distinction*, Professor, Physics

Fellows

SYED T. ALI, PhD *Roch.*, Professor, Mathematics and Statistics
SIMON L. BACON, PhD *Birm.*, Associate Professor, Exercise Science
WAYNE BRAKE, PhD *McG.*, Associate Professor, Psychology
GRANT BROWN, PhD *Nfld.*, Professor, Biology
ALEXANDRE CHAMPAGNE, PhD *C'nell.*, Assistant Professor, Physics
RICHARD DEMONT, PhD *Pitt.*, Associate Professor, Exercise Science
EMMA DESPLAND, PhD *Oxf.*, Associate Professor, Biology
JAMES GRANT, PhD *Guelph*, Professor and Chair, Biology
JOHN HARNAD, DPhil *Oxf.*, *Provost's Distinction*, Professor, Mathematics and Statistics
PAUL JOYCE, PhD *Dal.*, Professor, Chemistry and Biochemistry
LASZLO KALMAN, PhD *Szeged*, Associate Professor, Physics; Chemistry and Biochemistry
GUILLAUME LAMOUREUX, PhD *Montr.*, Assistant Professor, Chemistry and Biochemistry
DAVID MUMBY, PhD *Br.Col.*, Associate Professor, Psychology
JUDITH PATTERSON, PhD *Virginia Poly.Inst.*, Associate Professor, Geography, Planning and Environment
PETER PAWELEK, PhD *McG.*, Associate Professor, Chemistry and Biochemistry
JAMES G. PFAUS, PhD *Br.Col.*, Professor, Psychology
NATALIE PHILLIPS, PhD *Dal.*, Professor, Psychology
DIANE POULIN-DUBOIS, PhD *Montr.*, Professor and Associate Director, CRDH Psychology
REGINALD STORMS, PhD *Alta.*, Professor, Biology
VLADIMIR TITORENKO, PhD *Inst.Genetics & Indust.Micro.*, Associate Professor, Biology
VALTER ZAZUBOVITS, PhD *Tartu*, Associate Professor, Physics

Affiliate Fellows

MICHEL COTÉ, PhD *Calif.(Berkeley)*, Physics, Université de Montréal
MAJID FOTUHI, MD *Harv.*, PhD *Johns H.*, Johns Hopkins Medical Centre and Sinai Hospital of Baltimore
LUCIEN-ALAIN GIRALDEAU, PhD *McG.*, Biology, U.Q.A.M.
MICHAEL GREENWOOD, PhD *McG.*, Medicine, McGill University

For the complete list of faculty members, please consult the Department website.

Location

Loyola Campus

Richard J. Renaud Science Complex, Room: SP 363.00 – 363.09
514-848-2424, ext. 2595

Objectives

The aim of the Science College is to prepare students enrolled in one of Concordia's science programs for a life of research, teaching, or some similarly demanding intellectual pursuit in a profession. The academic program of the College complements the regular undergraduate curriculum and includes cross-disciplinary courses and student participation in laboratory research activities from the first year on. The collegial atmosphere fosters interaction among students and between students and faculty.

In Science College, students will gain an understanding of several areas of science, while specializing in whichever one they choose. Curricular structures frequently restrict students to a single discipline. To help counteract excessive specialization, the Science College has designed a series of courses to show what practising physicists think about physics; what mathematicians do when they are thinking mathematics: — not “an introduction to,” but “the state of the art.”

The College provides an opportunity for students to become acquainted with science as practised and understood by scientists today. Its curriculum is planned to fulfill the primary goals of the College — to provide an opportunity for experience in a research environment, for thinking about the nature of science, and for becoming aware of the style and content of the various scientific disciplines.

In Science College, students have the opportunity to work individually with active research scientists. This is done through a program of directed or independent study in each undergraduate year which enables them to undertake or participate in projects of discovery in a variety of different areas of scientific endeavour.

Students of the College will also be provided with an opportunity to consider the nature of science. The College offers courses in the intellectual and social context of science. Designed specifically for College students, these courses raise questions of broad interest to scientists and presume an understanding of the subject matter of science itself. Students will also be given the opportunity to consider the social and cultural framework of their science studies through a basic course in some aspect of humanistic studies. Finally, students will be encouraged to appreciate the link between clarity of thought and clarity of expression, through the availability of tutorial assistance in the development of writing skills.

Facilities

The College has study and lounge areas, computer facilities, a small library, and a few periodicals of general interest. The College offers students the opportunity and facilities to discuss matters of interest among themselves and with their professors. Science College also offers a number of courses and invites scientists to visit the University to meet College students.

Requirements for Admission to Science College

The program of Science College is academically demanding, involving concentration in one discipline and a critical investigation of other aspects of science. The College is committed to serious academic work and high standards, and seeks to attract talented and enthusiastic students who are willing to work hard in a search for a deeper understanding of their subject.

Students must enrol in a science program that leads to a BSc or BA (cognitive science) degree in order to be part of Science College. Students registered for a BA in Journalism are also eligible, as are students registered in the General Science Option of Computer Science.

In addition to the normal requirements for admission to the University's various programs, applicants are expected to have a good academic average. They will be considered on the basis of their academic record, and a personal interview. Preference will be given to students who show a disposition and an aptitude to profit from the unique features of the sort of fundamental scientific education which the College offers. Applicants are encouraged to provide evidence of the range of their intellectual interests and of any creative activity in which they may have been involved.

Students must be prepared to attend courses at times outside the normal University schedule. The College is open to full-time students only.

Science College and Journalism

A limited number of students who have been admitted to the Major in Journalism program may be allowed to register in the Science College, with a view to combining a basic understanding of science with a training in journalism.

Performance Requirement

Students in the College must obtain a minimum grade of "B-" in all courses required for the Minor in Multidisciplinary Studies in Science, as well as in all courses counted toward their discipline-based honours, specialization, or major program. Students who receive a grade lower than "B-" are permitted to repeat the course. Students who receive a second grade lower than a "B-" are normally withdrawn from the minor.

Further Information

Further information on the courses and activities of the Science College may be obtained either by writing or by telephoning the College office. Personal interviews with a fellow of the Science College may be arranged through the Science College office.

Science College Curriculum

The College offers a Minor in Multidisciplinary Studies in Science, consisting of a core of courses which is required of all students. This core consists of 30 of the 90 credits normally required for a BSc degree. These courses have been developed specifically for the College with the intention of providing a unique, integrated program of education in science.

Program

In addition to completing the core curriculum, students are responsible for satisfying their particular degree requirements by completing a departmental honours, specialization, or major program leading to a BSc or BA (cognitive science). The superscript indicates credit value.

24-30 Minor in Multidisciplinary Studies in Science

- 6 SCOL 270⁶
- 6 SCOL 290³, 390³
- 6 SCOL 490^{6*}
- 12 Chosen from SCOL 350^{3***}; SCOL 360^{3***}; LBCL 291^{6**}, 292^{6**}

**After consultation with the College, this course may be replaced by BIOL 490, CHEM 450, or PSYC 495.*

***Only one of these courses may be taken.*

****This course may be repeated twice for credit in this program, provided the subject matter is different each time. In special circumstances and with permission of the College, a repeat of this course may be replaced by a science course at the 300 level or higher outside the student's program.*

NOTE: Students who have taken BIOL 490, CHEM 450, or PSYC 495 are not required to take SCOL 490.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCOL 270 *Historical, Philosophical, and Social Aspects of Science* (6 credits)

Prerequisite: Membership in the Science College, or permission of the College. This course discusses the intellectual framework of science and the relationships between science and society, and the political and philosophical questions inherent in the scientific process. Students are expected to understand the scientific issues at the level at which they were originally addressed.

SCOL 290 *Directed and Independent Study I* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. The student works under the supervision of a member of the Faculty on either a practical laboratory project or a literature study. A formal, written report is required.

SCOL 350 *Current Issues in Physical, Biological and Mathematical Sciences* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. This course is designed to help students understand the "state of the art" in fields of science in which they are not specializing. It discusses problems under current study, and attempts to identify possible future directions of research. The approach is qualitative. Detailed technical knowledge is not prerequisite.

Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: This course may be repeated twice for credit in this program, provided the subject matter is different each time. In special circumstances and with permission of the College, a repeat of this course may be replaced by a science course at the 300 level or higher outside the student's program.

NOTE: Students who have received credit for SCOL 351, 352, or 353 may not take this course for credit if the subject matter is the same.

SCOL 360 *Topics for Multidisciplinary Study* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. The purpose of this course is to introduce students to problems and areas of study which transcend traditional disciplinary barriers. A chosen area of investigation is treated from the viewpoint of various disciplines. Lectures from different areas may be used for this purpose. The aim is to show the contributions made by each field to the understanding of the problem, and how they complement each other.

Specific topics for this course will be stated in the Undergraduate Class Schedule.

NOTE: This course may be repeated twice for credit in this program, provided the subject matter is different each time. In special circumstances and with permission of the College, a repeat of this course may be replaced by a science course at the 300 level or higher outside the student's program.

NOTE: Students who have received credit for this topic under a SCOL 398 number may not take this course for credit.

SCOL 370 *Selected Readings in Multidisciplinary Study* (3 credits)

Prerequisite: Membership in the Science College and/or permission of the College. The purpose of this course is to introduce students to problems and areas of study which transcend traditional disciplinary barriers. A chosen area of investigation is treated from the viewpoint of various disciplines. Readings from different areas may be used for this purpose under guidance of one or more fellows of the College. The aim is to show the contributions made by each field to the understanding of the problem, and how they complement each other.

NOTE: Students who have received credit for this topic under a SCOL 398 number may not take this course for credit.

SCOL 390 *Directed and Independent Study II* (3 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 290 registers for SCOL 390. Students are encouraged to work in a field different from that of their SCOL 290 project.

SCOL 398 *Selected Topics in Multidisciplinary Studies* (3 credits)

Prerequisite: Membership in the Science College and/or permission of the College. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

SCOL 490 *Directed and Independent Study III* (6 credits)

Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL 390 registers for SCOL 490. Students are encouraged to work in a field different from that of their SCOL 290 and 390 projects. Students complete a research project approved in advance by the College, under the supervision of a fellow of the College and/or a faculty member in a scientific discipline at Concordia or elsewhere.

NOTE: After consultation with the Science College, students may register in BIOL 490, CHEM 450, or PSYC 495 and upon successful completion be exempted from SCOL 490. Students may also choose to do the honours project and in addition a SCOL 490 project.

Principal

GENEVIÈVE RAIL, PhD Ill., Professor

Professor

VIVIANE NAMASTE, PhD U.Q.A.M., Provost's Distinction

Associate Professors

GADA MAHROUSE, PhD Tor.

CHANTAL MAILLÉ, PhD U.Q.A.M.

Fellows

ADEELA ARSHAD-AYAZ, PhD McG.

RACHEL BERGER, PhD Camb.

LINDA KAY, MA C'dia.

KIMBERLY MANNING, PhD Wash.

LORNA ROTH, PhD C'dia.

ROSEMARIE SCHADE, DPhil York (U.K.)

Permanent Fellows

ARPI HAMALIAN, MA Amer.of Beirut

ELIZABETH HENRIK, PhD Tulane

SUSAN HOECKER-DRYSDALE, PhD Louisiana State

MAÏR E. VERTHUY, MA Tor.

KATHERINE WATERS, MA Oxf.

Research Associates

FARIDA ABLA, MFA Ark.

CHRISTIANA ABRAHAM, PhD McG.

SIMA APRAHAMIAN, PhD McG.

MICHIKO ARAMAKI, PhD McG.

AMÉLIE BARRAS, PhD L.S.E.Lond.

RENA K. BIVENS, PhD Glas.

SONIA CANCIAN, PhD C'dia.

JEAN CHAPMAN, PhD Brad.

DOLORES CHEW, PhD Calc.

KARIN DOÉRR, PhD McG.

TATIANA FRASER, MM McG.

DOROTHY GELLER, PhD George Washington

DANA HEARNE, PhD Tor.

SAFINAZ JADALI ARAGHI, PhD R.Schuman, Strasbourg

ABBY LIPPMAN, PhD McG.

PAULINE MCKENZIE AUCOIN, PhD Tor.

ELIZABETH J. MEYER, PhD McG.

DENISE NADEAU, MA Oxf.

RUMANA NAHID SUBHAN, PhD Nagoya

KATHLEEN O'GRADY, PhD Trin.Coll.Camb.

JILL STRAUSS, DPhil Ulster

TLILI HAÏFA, PhD Paris V, Sorbonne

NOORTJE VAN AMSTERDAM, MSc Amst.

TRACY YING ZHAN, PhD S.Fraser

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Annex MU, Room: 202

514-848-2424, ext. 2370

Objectives

The Institute strives to stimulate the investigation and understanding of the role of women in society and to encourage women to develop their creative potential. In research and teaching, special attention is given to gender, race, class, and sexual orientation. The Institute has several objectives: to investigate the history, current situation, and changing needs of women; to generate support for research topics relevant to women; to encourage full recognition of women's contribution to human achievement; to ensure that women and gender issues are studied in a non-discriminatory manner; to strengthen women's rights and the conditions for exercising them; to ensure the equality of all individuals without distinction of race, sex, age, language, or religion. Women's Studies encompass and modify all areas of knowledge. Through the introduction of new perspectives and new research, this field of study helps to correct and complete the traditional scholarly record. It is in essence interdisciplinary and multidisciplinary since the specificity of the condition of women embraces all existing disciplines. It thus questions the concept and structures of knowledge contained within the disciplinary boundaries and contributes to bringing about a reunification of the knowledge and scholarship that has become increasingly fragmented.

SIMONE DE BEAUVOIR INSTITUTE

Founded in 1978 to promote the understanding of the historical and contemporary situation of women in society, the Simone de Beauvoir Institute of Concordia University helps women to discover and develop their potential, both by its academic base in Women's Studies and by its co-curricular activities. We are honoured that Simone de Beauvoir authorized us to use her name, and expressed great interest in being informed of our activities.

All students registered in the Specialization, Major, Minor, or Certificate in Women's Studies are members of the Institute. Other undergraduate students are welcome to become members if they undertake to complete nine credits of WSDB courses.

The co-curricular life of the Institute is extremely important, and all members are expected to contribute to our activities. Exciting opportunities are available to organize workshops, colloquia, and debates on subjects that interest the members, as well as to collaborate with women's organizations outside the University on research projects and other joint ventures.

Admission Requirements for the Simone de Beauvoir Institute

Students may apply simultaneously to Concordia University and the Simone de Beauvoir Institute by filling out and submitting the Concordia University Application for Admission with the box for "Colleges" checked and "Simone de Beauvoir Institute" written in the space provided. Further information about the Institute can be obtained by calling or visiting its offices or website at wsdb.concordia.ca.

Programs

*Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.*

Students should consult with the Women's Studies advisor prior to registering for Women's Studies courses.

60 BA Specialization in Women's Studies

- 24 WSDB 290³, 291³, 292³, 380³, 480³, 490³, 496⁶
- 18 Chosen from WSDB 383³, 384³, 390³, 391³, 392³, 393³, 394³, 491³, 494³
- 18 Chosen from the list of Optional Courses

NOTE: To be admitted to the specialization, students must have completed a minimum of 24 credits in the Women's Studies Major and obtain approval from the Principal following the submission of a letter of intent. In addition, students must have a minimum GPA of 3.0 to be accepted and must maintain an overall WGPA of 3.0 while in the specialization.

42 BA Major in Women's Studies

- 18 WSDB 290³, 291³, 292³, 380³, 480³, 490³
- 15 Chosen from WSDB 383³, 384³, 390³, 391³, 392³, 393³, 394³, 491³, 494³
- 9 Chosen from the list of Optional Courses

30 Minor in Women's Studies

- 15 WSDB 290³, 291³, 292³, 380³, 480³
- 9 Chosen from WSDB 383³, 384³, 390³, 391³, 392³, 393³, 394³, 490³, 491³, 494³
- 6 Chosen from the list of Optional Courses

30 Certificate in Women's Studies

- 15 WSDB 290³, 291³, 292³, 380³, 480³
- 9 Chosen from WSDB 383³, 384³, 390³, 391³, 392³, 393³, 394³, 491³, 494³
- 6 Chosen from the list of Optional Courses

Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Optional Courses

WSDB 275³, 298³, 335³, 365³, 370³, 375³, 381³, 382³, 383³, 384³, 390³, 391³, 392³, 393³, 398³, 490³, 491³, 492³, 498³; ANTH 276³; ARTH 381³; CLAS 353³; COMS 368³, 472³; EDUC 321³; ENGL 303⁶, 351³, 352³, 382³, 393³; FLIT 360³, 471³, 472³; FMST 329³, 392³, 393³; HIST 305³, 347³; INTE 270⁶, 275³; PHIL 371³, 471³; POLI 309³; RELI 381³, 382³, 383³, 384³, 385³, 386³, 387³, 392³; SOCI 276³, 380³, 475³, 476³; SCPA 352³; THEO 295³

NOTE: Students should consult the appropriate departments concerning possible prerequisites for the courses listed under Optional Courses.

Language/Langue

Les règlements actuels permettent à toute étudiante et tout étudiant d'écrire ses devoirs ou examens en anglais ou en français dans tous les cours offerts, à l'exception des cours de langue. La langue d'enseignement sera normalement l'anglais. Non-francophone students may equally submit assignments in English in Français 451, 476, and 477, as long as they are taking the course for credit in Women's Studies or as an elective, and not as part of a program of the Département d'études françaises.

Courses

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

N.B.:

- (1) 300-level courses are generally open only to students who have successfully completed at least 15 credits which include WSDB 290 and 291. Students who do not have these prerequisites may also register with permission of the Institute.
- (2) 400-level courses are generally open only to students who have successfully completed at least 30 credits which include WSDB 290, 291, and 380. Students who do not have these prerequisites may also register with permission of the Institute.

WSDB 275 Women of Colour (3 credits)

This course provides an overview of the experience of visible minority women in North America, exploring the lives and cultures of individuals who confront both racism and sexism, as well as the ways they create communities of support and resistance.

NOTE: Students who have received credit for this topic under a WSDB 298 number may not take this course for credit.

WSDB 290 Introduction to Historical Perspectives in Women's Studies (3 credits)

This course provides an introduction to theories and writing that affect the lives of women. Through the writing of feminist authors, students examine, from mainly the 20th century, the development of feminist theories and debate. Specific authors may include Simone de Beauvoir, Audre Lorde, Gloria Anzaldua, Angela Davis, Adrienne Rich, Monique Wittig, and Chandra Mohanty.

WSDB 291 Introduction to Contemporary Concerns in Women's Studies (3 credits)

This course explores a range of current issues and debates within feminism. Using interdisciplinary feminist theories that consider how systems of power such as patriarchy, capitalism, racism, and heterosexism constitute one another, it examines particular local and global topics of interest/concern which may include health, education, work, violence against women, globalization, militarism, media and cultural representations, families, and feminist activism.

NOTE: Students who have received credit for WSDZ 291 may not take this course for credit.

WSDB 292 Feminisms and Research Methods (3 credits)

Prerequisite: Enrolment in a Women's Studies program or permission of the Institute. This course exposes students to a variety of research practices from a feminist perspective. These practices can include oral history, interviews, archival research, and participant observation. Students learn how to gather, analyze, and effectively present ideas and information. Practical, hands-on exercises offer an opportunity for learning. Examination of research methods occurs in dialogue with questions of how knowledge is organized. Students are also exposed to recent developments in information literacy. This course prepares students to conduct their own research projects throughout their studies.

WSDB 298 Selected Topics in Women's Studies (3 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 335 Gender and Nation: The Irish Experience (3 credits)

This course looks at women in Irish politics, culture, and society from the late-18th century to the present, with particular focus on the 20th century. It examines the nature of women's involvement in nationalist and feminist movements, their position in relation to the state, the Church (Catholic and Protestant), education, work, sexuality, and cultural production (literature, visual art, and film).

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 365 Feminist Theory and Popular Culture (3 credits)

This course examines how feminism has not only commented on the world of pop culture but has entered and altered it. Through a study of television, film, advertising, pop music, cyber culture, and kiddie culture, students look at the ways in which popular culture has impacted how women view themselves and how they are viewed.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 370 Workshops in Special Areas of Women's Studies (3 credits)

Prerequisite: See N.B. number (1). The purpose of these workshops is to examine a number of issues relevant to Women's Studies. Specific topics for this course will be stated in the Undergraduate Class Schedule.

WSDB 375 Black Women's Culture (3 credits)

This course surveys the historical and contemporary experience of Black women in North America through the lenses of culture — the daily culture they live through family, community, work, health issues, belief systems, and power relations, as well as the culture they make through expressive forms like literature, music, theatre, film, and dance.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 380 Feminist Thought I (3 credits)

Prerequisite: See N.B. number (1). This course introduces students to the main aspects of feminist thought across the disciplines. Through a selection of readings and case studies, feminist thought is examined in two interrelated senses: the exercise of woman-centred inquiry, and feminism as a critique of existing knowledge frameworks. Students are introduced to fundamental feminist notions such as the distinction between the private and the public, the notion of experience, androcentrism, and the division between the family and the economy. The history of feminist thought is explored as well as its articulation since the 1970s and its contribution to Women's Studies and to social theory in general. Also examined is the potential and power of different feminist theories to effect social change and transform the social world they analyze.

WSDB 381 First Nations' Women (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, and 292, and nine credits from other WSDB or elective courses. This course aims to acquaint students with North American First Nations, particularly the women's contemporary realities. Other pedagogical objectives are to facilitate an understanding of cultural perception; to develop a critical viewpoint of ethnocentrism in mainstream society; to introduce the current debate around minority representation, cultural appropriation, and post-colonial theory.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 382 Science, Technology and Women's Lives (3 credits)

Prerequisite: See N.B. number (1). This course explores both historical trends and contemporary concerns regarding women, science, and technology. It investigates stereotypes of science and scientists; western science vs. native knowledge; science as a social activity and as a career choice for women; and the effects of science and technology on women's lives.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 383 Lesbian Issues and Realities (3 credits)

Prerequisite: 18 credits, including WSDB 290, 291, 292, and nine credits from other WSDB or elective courses. This course introduces students to the field of lesbian studies and examines lesbian existence within a historical as well as a contemporary context. A central theme of the course is diversity among lesbians, not only in terms of race, class, ability but also in terms of political consciousness.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 384 Queer Feminism (3 credits)

This course especially addresses lesbian and bisexual perspectives on perverse desire, its expression and its reflection in art, cinema, popular culture, poetry, fiction, and queer theory. It studies these through a critical examination of issues arising in the historical institutions of law, medicine, religion, psychoanalysis, philosophy, and biology, to representations of sexuality in popular culture, media, and local politics and grassroots practices, drawing upon examples committed to feminist politics of location.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 390 Women and Peace (3 credits)

Prerequisite: See N.B. number (1). This course covers a series of themes related to feminist peace politics such as violence, wars against women, militarism, roles played by women during wars, war mythologies, women in the military, the war industry and the new world order, feminist peace activism.

WSDB 391 Health Issues: Feminist Perspectives (3 credits)

Prerequisite: See N.B. number (1). This course presents feminist, intersectional, postcolonialist, poststructuralist and queer examinations of a variety of women's health issues. It explores the complex cultural politics that tend to legitimize existing power relations in health care, health research, and "health" industries. Topics include biopolitics and surveillance of women's bodies, medicalization and disease mongering, patriarchal capitalism and the health industry, cosmetic surgery and oppression or agency, women's health and sociocultural identifications, feminist medical ethics, and alternative and feminist health care.

WSDB 392 Féminismes dans la francophonie (3 crédits)

Préalable: 18 crédits, dont WSDB 290, 291, et 292, plus neuf autres crédits en WSDB ou cours électifs. À partir de textes théoriques et d'ouvrages traitant de la vie quotidienne, ce cours examine les similitudes, les analogies et les traits distinctifs des luttes des femmes durant les deux dernières décennies, ici et ailleurs dans la francophonie, notamment les luttes des Arabes, des Antillaises ou des femmes d'Afrique noire.

WSDB 393 *Critical Race Feminisms* (3 credits)

Prerequisite: See N.B. number (1). This course explores the concepts of race, racism, and racialization, alongside feminist theories and practices. Drawing from feminist and critical race theories, the course focuses on questions of power, knowledge production, and interlocking systems of oppression within local and global contemporary contexts. It provides opportunities to reflect upon anti-racist feminist practice and to apply anti-racist analyses.

NOTE: Students who have received credit for this topic under a WSDB 398 number may not take this course for credit.

WSDB 394 *Tutorial in Women's Studies* (3 credits)

Prerequisite: Enrolment in a Women's Studies program; 24 university credits including WSDB 290, 291, 292 and 380; and permission of the Institute. In addition, students must have a minimum GPA of 3.0 (B) and a demonstrated ability to carry out independent research. Tutorials are given only in exceptional circumstances and should focus on a topic not covered under the normal curriculum. A Tutorial Request form must be completed by the student and then approved by a full-time Simone de Beauvoir Institute faculty member acting as a supervisor.

NOTE: Students who have received credit for this topic under a WSDB 398 or 498 number may not take this course for credit.

WSDB 398 *Selected Topics in Women's Studies* (3 credits)

WSDB 399 *Selected Topics in Women's Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

WSDB 480 *Feminist Thought II* (3 credits)

Prerequisite: See N.B. number (2). While *Feminist Thought I* examines feminism as critique of theory in various historical and disciplinary topics, this course looks closely at the different feminist theories of the social world. The course considers fundamental concepts of Marxist feminism, post-structuralist feminist theory, feminist critical theory, and post-colonialist feminisms. Students learn how to summarize these different theoretical approaches, as well as how to think about them in a comparative manner.

WSDB 490 *Feminist Ethics* (3 credits)

Prerequisite: See N.B. number (2). This interdisciplinary seminar considers the effect of systems of gender, race, and class on women's place in society. It takes into account recent developments in feminist scholarship in the humanities and social sciences.

WSDB 491 *Feminist Perspectives on Culture* (3 credits)

Prerequisite: See N.B. number (2). This seminar explores the central concepts and theories in feminist cultural studies, as they inform feminist, post-colonial, queer, and post-structuralist understandings of culture. The focus is on women as cultural producers and subjects in/of various cultural texts (e.g. cinema, visual arts, music, advertising, popular media, feminist writings). The discursive construction of gender, as it is inflected by class, race, sexuality, and location, is examined as well as the ways in which it is used, displayed, imagined and performed in contemporary culture. Students develop practical and analytical skills, posing questions of how particular cultural narratives function within social, political and economic contexts. Students are required to participate in and lead discussions of the readings and to create and/or critique cultural productions.

WSDB 492 *Post-colonial and Anti-colonial Feminist Theories and Practice* (3 credits)

Prerequisite: See N.B. number (2). The course is devoted to understanding the gendered dimensions of colonial/imperial relations of power and resistance both in historical and contemporary contexts. The main themes covered in the course include settler colonialism in Canada; knowledge, representations and power; contemporary challenges and resistance to anti-imperialist struggles; and post-colonial analyses of current economic and political relations.

NOTE: Students who have received credit for this topic under WSDB 498 may not take this course for credit.

WSDB 494 *Advanced Tutorial in Women's Studies* (3 credits)

Prerequisite: Enrolment in a Women's Studies program; 24 university credits including WSDB 290, 291, 292, 380; and permission of the Institute. In addition, students must have a minimum GPA of 3.0 (B) and a demonstrated ability to carry out independent research. Tutorials are given only in exceptional circumstances and should consist of a topic not covered under the normal curriculum. A Tutorial Request form must be completed by the student and then approved by a full-time Simone de Beauvoir Institute faculty member acting as a supervisor.

NOTE: Students who have received credit for this topic under a WSDB 398 or 498 number may not take this course for credit.

WSDB 496 *Directed Research* (6 credits)

Prerequisite: Enrolment in the Specialization in Women's Studies; 30 credits, including WSDB 290, 291, 292, 380, 480, and permission of instructor. Students work with an individual faculty member in a particular area of Women's Studies. Students are expected to produce a substantial research project.

WSDB 498 *Seminar in Women's Studies* (3 credits)

WSDB 499 *Seminar in Women's Studies* (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

John Molson School of Business

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Section 61

Faculty*Dean*STEVE HARVEY, PhD *Guelph**Associate Deans*GEORGE K. KANAAN, PhD *Wis.(Madison)*, Academic and Student Affairs – Undergraduate ProgramsA. BAKR IBRAHIM, PhD *C'dia.*, CA RIA/CMA, Master's and Graduate Diploma ProgramsHARJEET BHABRA, PhD *Missouri-Columbia*, Research and Research Programs

Location*Sir George Williams Campus*

MB Building, Room: 015-115

514-848-2424, ext. 2779

Mission Statement

"We educate students to enable them to become business leaders and responsible global citizens. We place strong emphasis on teaching, research and scholarship, and we strive for an intellectual climate in which excellence, innovation and imagination flourish. As an urban business school, we welcome Concordia's multilingual and multicultural constituency. Our international faculty, diverse student body, strong links to the local business community and relationships with international partners provide a learning environment that responds to the demands of a global economy and recognizes the realities of the contemporary world to achieve a better future."

Approved by Faculty Council • September 2007

61.20 ADMISSION REQUIREMENTS

The general requirements for admission to Concordia University are listed in §13.

Cegep Entrance — the 90-credit program

The prerequisites for the 90-credit program are as follows:

Subject*:	Concordia Courses:
Calculus I	MATH 209
Linear Algebra	MATH 208
Micro, Macro Economics	ECON 201, 203
Computer Literacy	DESC 200

**NOTE: Equivalencies will be determined at the time of acceptance.*

Students with a DEC will complete the 90-credit program. Students who have a complete DEC but are lacking one or more of the prerequisite courses may take them within the 90-credit program as elective credits during the first year of the program.

Mature Entry — the 108-credit program

In addition to the 90-credit program, Mature Entry students will be required to complete the following 18 credits:

- 6 credits in MATH 208, 209
- 6 credits in ECON 201, 203
- 3 credits in DESC 200
- 3 additional elective* credits

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

Extended Credit Program — the 120-credit program

In addition to the 90-credit program, students in the Extended Credit Program will be required to complete the following 30 credits:

- 6 credits in MATH 208, 209
- 6 credits in ECON 201, 203
- 3 credits DESC 200

- 3 credits ENGL 210 or 212
- 12 additional elective* credits

**These elective credits must be selected from outside the offerings of the John Molson School of Business.*

NOTE: Because of the extensive use of computers in various programs, students are advised to have access to a personal computer.

61.21 UNDERGRADUATE DEGREE PROGRAMS

The John Molson School of Business offers two distinct undergraduate programs. The Bachelor of/Baccalaureate in Commerce (BComm) is a structured program in which the student will select a major from those offered by the School of Business. The Bachelor of/Baccalaureate in Administration (BAdmin) is a flexible program which permits the student to pursue interests outside the School of Business, and offers the possibility of complementing a fundamental grounding in Administration with minor concentrations in an area of interest. Degree requirements listed below apply to all students entering the program on or after June 1, 2001.

61.21.1 General Education Requirement

The John Molson School of Business is committed to the concept of General Education. Students graduating from the Business programs will have acquired the benefits of a general education through the 12 elective non-Business credits they are required to complete.

61.21.2 The Bachelor of/Baccalaureate in Commerce

The program provides the student with an education for careers in business. This is accomplished through an interdisciplinary curriculum that is intellectually challenging. The first year of the program provides knowledge of fundamental business concepts and operational skills that form the base for the core curriculum. The second year of the program builds on this foundation to provide a broad experience in all phases of business. The interdisciplinary nature of the program allows students to analyze, formulate, judge, and solve challenging business problems. The last year of the program provides students with an opportunity for in-depth study of a specific business discipline.

More specifically, by the end of their BComm studies, students will be able to:

1. apply the core concepts within each business discipline;
2. analyze business situations using information and reasoning to solve problems and make decisions;
3. demonstrate an understanding of global and multicultural business issues and practices;
4. use appropriate business information technologies;
5. communicate effectively, both orally and in writing, to different audiences;
6. collaborate and work effectively in teams;
7. demonstrate an understanding of ethical issues and responsibilities;
8. become self-directed learners.

As part of the Bachelor of/Baccalaureate in Commerce program, students will select 12 credits of elective courses outside the offerings of the School. Those credits, which will meet the School's General Education requirement, should be chosen in areas that complement the students' overall university education.

Degree Requirements:

- 42 credits from the core
- 12 elective credits outside the School of Business
- 24 credits to apply towards the major
- 12 elective credits chosen by the student

NOTES:

1. All students are required to declare a major.
2. Students may add a second major in another business field. A double major requires completion of 102 credits as follows: 42 credits from the core, 12 elective credits outside the School of Business, 24 credits to apply towards the first major, and 24 credits to apply towards the second major. Minors are not available with a double major.
3. The School may impose quotas on some majors.

61.21.3 The Bachelor of/Baccalaureate in Administration

The aim of the BAdmin program is to develop capable problem-solvers and decision-makers. The program provides students with a fundamental grounding in administration through the same set of core courses available to BComm students. Furthermore, students have the opportunity to pursue a wide range of interest amongst the various courses offered by the University. BAdmin students are expected to achieve the same learning goals as BComm students by the end of their BAdmin studies.

Degree Requirements:

- 42 credits from the core
- 18 credits from within the School of Business and/or its disciplines
- 30 elective credits chosen by the student, but outside the School of Business, 15 of these must be beyond the introductory level.

NOTE: For the BComm and BAdmin programs, a maximum of nine ESL credits may count toward the regular 90-credit degree, a maximum of 12 credits may count toward the 108-credit degree, and a maximum of 15 credits may count toward the 120-credit degree if the student is required to complete ESL courses. For students who are not required to complete ESL courses a maximum of six ESL credits may count towards their degree. Additional credits in ESL courses will be considered as credits completed above and beyond the degree requirements.

61.22 THE CREDIT CORE

The required 42-credit core is identical for both programs and comprises the following courses:

Courses at the 200 level

COMM 210 Contemporary Business Thinking
 COMM 212 Business Communication
 COMM 215 Business Statistics
 COMM 217 Financial Accounting
 COMM 220 Analysis of Markets
 COMM 222 Organizational Behaviour and Theory
 COMM 223 Marketing Management I
 COMM 225 Production and Operations Management
 COMM 226 Business Technology Management

Courses at the 300 level

COMM 305 Managerial Accounting
 COMM 308 Introduction to Finance
 COMM 315 Business Law and Ethics
 COMM 320 Entrepreneurship

Course at the 400 level

COMM 401 Strategy and Competition

NOTE: Students are responsible for following the correct sequence of courses required for the completion of a particular program.

JOHN MOLSON SCHOOL OF BUSINESS

Program	Honours	Major	Minor	Certificate
Accountancy		X		X
Assurance, Fraud Prevention and Investigative Services			X	
Business Studies			X ¹	X ¹
Business Technology Management		X	X	
Data Intelligence			X	
Economics		X	X	
Entrepreneurship			X	
Finance	X	X	X	
Financial Reporting			X	
Human Resource Management		X	X	
International Business		X	X	
Management		X	X	
Management Accounting			X	
Marketing		X	X	
Supply Chain Operations Management		X	X	

Students will indicate their preferred field of concentration at the time of application for entry. It should be noted that students may change their major and/or minor after completion of their first year of study.

¹This program is not open to students registered in a program leading to the undergraduate degree of Commerce or Administration. Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an

Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

61.22.1 Academic Performance Regulations

NOTE: The GPA regulations apply to all students, including those with Visiting status, registered in programs offered by the John Molson School of Business. This also includes the Minor in Business Studies and certificate programs.

The objectives of these regulations are:

- a) to ensure that the School of Business can certify that all of its graduates are qualified to enter their profession;
- b) to ensure that students can, with the assistance or intervention of the School of Business, assess themselves objectively, and plan programs of study designed to meet their individual needs.

Annual Weighted Grade Point Average (WGPA)*

Requirements and Consequences

*See §16.3.11, II for definition of annual WGPA.

Acceptable standing requires that a student obtain an annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory in §16.3.3, a WGPA of 2.00 is required for acceptable standing.

Students in acceptable standing must repeat all courses in which failing grades were obtained provided that these courses are required for their program.

Conditional standing results when a student obtains an annual WGPA between 1.50 and 2.00. Students in conditional standing may not write supplemental examinations but may proceed subject to the following conditions:

- a) they must receive academic counselling from the appropriate member of the Dean's Office;
- b) they must successfully repeat all courses in which failing grades were obtained provided that these courses are required for their program, or replace them by alternatives approved by the Dean's Office;
- c) in no case will the number of credits exceed 15 per term for full-time students and six per term for part-time students;
- d) they must obtain acceptable standing at the time of their next assessment. If not, they are considered to be in failed standing.

Failed standing results when a student obtains an annual WGPA of less than 1.50, or fails to achieve acceptable standing after being on conditional standing at the last assessment.

- Failed students are subject to the following regulations:
 1. They may not write supplemental examinations.
 2. They are dismissed from their program for a minimum period of one year.
- Students who are in failed standing for a second time are dismissed from the University for a longer period of time.
- In subsequent years, should failed students wish to return to university studies, they must contact the Office of the Associate Dean, Academic and Student Affairs, for information concerning conditions and procedures for seeking readmission.
- Readmission is not automatic and is dependent upon an assessment of the applicant's prospects for successful completion of the program. If readmitted, students will be placed on academic probation and restricted to a maximum of six credits per term. They must achieve acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.
- Decisions of the relevant authority in the Faculty to which application is made are final.

Graduation Requirements

Students must satisfy all course requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00.

The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined after adding the grade points obtained for these credits to those included in the computation of the GPA of the last assessment period. Students who fail to meet acceptable standing but meet conditional standing will have the following options:

- a) register for 12 credits and meet the criteria for acceptable standing;
- b) register for fewer than 12 credits. In this case, standing will be determined after adding the grade points obtained for these credits to those included in the computation of the GPA of the last assessment period.

NOTE: Dean's Office is to be understood as being the appropriate member of the Dean's Office, normally the Associate Dean, Academic and Student Affairs, or delegate.

61.22.2 Registration Regulations

1. Students in the John Molson School of Business who have a lapse in their program of study for six consecutive terms or more will not be allowed to continue in their program before meeting with an academic advisor.
2. Students are allowed to register in a maximum of 12 credits during the summer session (including a maximum of six credits in any term within that session), except for students following the co-operative format of the program.

61.30 GENERAL INFORMATION

Failures/Prerequisites

Students are cautioned that if they fail a course that is a prerequisite for a subsequent course, they should repeat and pass that failed course before registering in the subsequent course. For example, a student who fails COMM 217 in the fall term, and has registered in COMM 305 in the subsequent winter term, must drop COMM 305 and repeat COMM 217 in the winter term before registering in COMM 305 again.

Students who are not able to register in the failed course(s) should contact the undergraduate programs' office during the course-change period at the beginning of each term.

Students who are registered for a course in which they do not have the appropriate prerequisite must adjust their registration accordingly. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.

NOTE: THERE ARE NO SUPPLEMENTAL EXAMINATIONS IN THE JOHN MOLSON SCHOOL OF BUSINESS.

Proficiency in Canada's Official Languages

The business community and governments have a preference for university graduates who are functional in both the English and French languages. All students are therefore advised to take advantage of the opportunities available to them at this University to ensure that they have good command of these two languages upon graduation.

61.35 JOHN MOLSON SCHOOL OF BUSINESS COURSES

COMM 210 *Contemporary Business Thinking* (3 credits)

Prerequisite: COMM 212 previously or concurrently; ECON 201 or 203 or equivalent previously or concurrently. This course exposes students to an in-depth reading of several contemporary business books. It aims to incite students to develop a critical perspective on business literature. Students are also encouraged to explore popular and influential business writing; expose and evaluate the central ideas for scope, relevance, and managerial utility.

NOTE: It is recommended that part-time students complete this course, along with COMM 212, as early in their program as possible.

NOTE: Students who have received credit for MANA 201 may not take this course for credit.

COMM 212 *Business Communication* (3 credits)

Prerequisite: DESC 200 or INTE 290 previously or concurrently. This course focuses on the principles and techniques of clear, concise, and effective, written and oral communication, especially as they apply to business. The formal, grammatical, and stylistic elements of written and oral business communication are emphasized. In addition, students are instructed in and experience the use of audiovisual means of communication.

NOTE: It is recommended that part-time students complete this course, along with COMM 210, as early in their program as possible.

COMM 215 *Business Statistics* (3 credits)

Prerequisite: MATH 208 or equivalent; MATH 209 or equivalent; DESC 200 or INTE 290 or COMP 248 previously or concurrently.

This course introduces the fundamentals of statistics as applied to the various areas of business and administration. Topics covered include techniques of descriptive statistics, basic theory of probability and probability distributions, estimation and hypotheses testing, chi-square tests in contingency table analysis and for goodness-of-fit, and linear regression and correlation.

COMM 217 *Financial Accounting* (3 credits)

Prerequisite: COMM 210 previously or concurrently. This course examines the theory and practice involved in measuring, reporting, and analyzing an organization's financial information. Concepts underlying financial statements are discussed, with an emphasis on generally accepted accounting principles. Disclosures/requirements concerning financial statements as well as information needs of decision-makers are introduced.

COMM 220 *Analysis of Markets* (3 credits)

Prerequisite: COMM 210, 215; ECON 201 or equivalent; ECON 203 or equivalent previously or concurrently. This course provides a general perspective on the history, operation and relationships between Canadian and international product, labour and financial markets. Specifically, students are introduced to issues of fundamental importance to today's managers and entrepreneurs such as changes in structure and competitiveness in these markets in response to government policies, the determination and behaviour of interest rates, inflation, market integration, and the role and function of financial intermediation. It further provides students with the knowledge of the role and impact of regulation and other government interventions in these markets.

COMM 222 *Organizational Behaviour and Theory* (3 credits)

Prerequisite: COMM 210, 212. This course is designed to provide students with an opportunity to study individual behaviour in formal organizations. Through theoretical case and experiential approaches, the focus of instruction progressively moves through individual, group and organizational levels of analysis. Topics in the course include perception, learning, personality, motivation, leadership, group behaviour, and organizational goals and structure.

NOTE: Students who have received credit for MANA 202 may not take this course for credit.

COMM 223 *Marketing Management I* (3 credits)

Prerequisite: COMM 210, COMM 212 previously or concurrently. This survey course introduces students to the key concepts in marketing. Topics covered include marketing strategy, buyer behaviour, and the impact of technology on the discipline. The course also explores the important role that marketing plays in advancing society.

NOTE: Students who have received credit for COMM 224 or MARK 201 may not take this course for credit.

COMM 225 *Production and Operations Management* (3 credits)

Prerequisite: COMM 210, 212, 215. This course is an introduction to contemporary operational issues and techniques in the manufacturing and service sectors. Among the topics covered are operations strategy, forecasting, materials' management, total quality management, time-based competition, and minimal manufacturing. Mathematical modelling in resource allocation is also introduced. Cases and computer-aided quantitative tools for decision-making are used throughout the course with an emphasis on the interactions between production/operations management and other business disciplines.

COMM 226 *Business Technology Management* (3 credits)

Prerequisite: COMM 210 previously or concurrently. The objective of this course is to provide students with an understanding of the role of information technology in business organizations. Students learn how information technologies can be used to create business value, solve business problems, accomplish corporate goals and achieve and maintain a competitive advantage.

NOTE: Students who have received credit for COMM 301 may not take this course for credit.

COMM 299 *Special Topics in Business* (3 credits)

This course enables students to focus on a specific topic in business that is of interest to all students.

COMM 305 *Managerial Accounting* (3 credits)

Prerequisite: COMM 217. This course covers the development of accounting information to assist management in carrying out its functions effectively and efficiently. Concepts and techniques for planning, performance evaluation, control, and decision-making are introduced. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.

COMM 308 *Introduction to Finance* (3 credits)

Prerequisite: COMM 217; COMM 220 previously or concurrently. This course provides a general understanding of the fundamental concepts of finance theory as they apply to the firm's long-run and short-run financing, and investment decisions. Building on the objective of firm value maximization, students become familiar with the conceptual issues underlying risk and return relationships and their measurements, as well as the valuation of financial securities. They also learn the concept of cost of capital, its measurement, and the techniques of capital budgeting as practised by today's managers. Students are introduced to the basic issues surrounding the firm's short-term and long-term funding decisions and its ability to pay dividends.

COMM 315 *Business Law and Ethics* (3 credits)

Prerequisite: COMM 308. This course allows students to develop a degree of familiarity with the important ethical and legal aspects of business and to become more aware of and comfortable with resolving ethical and legal components of their decision-making and with distinguishing right from wrong business behaviour.

COMM 320 *Entrepreneurship* (3 credits)

Prerequisite: COMM 222, 223 or 224, 305, 308. This course emphasizes the entrepreneurial aspects of management that are required to create, develop, and sustain either a new business venture or a major project/initiative within an existing organization. The integrative nature of the course requires an understanding of each functional area of business. Students will have the opportunity to demonstrate the teamwork, leadership, communication, and the other skills stressed throughout the program.

NOTE: Students who have received credit for COMM 410 may not take this course for credit.

COMM 401 *Strategy and Competition* (3 credits)

Prerequisite: 45 business credits including COMM 225; COMM 226 or 301; COMM 315 and 320 previously or concurrently. This capstone course requires graduating students to demonstrate their ability to integrate the knowledge and skills they have acquired during their Commerce program. This course introduces the concepts of strategic management and competitive analysis. Emphasis is given to integrating concepts and ideas from the major functional areas such as marketing and finance to give a global perspective on decision-making and directing modern business enterprises. Lecture topics and case studies are selected to portray the nature of the strategic process and the dynamics of competition in a variety of contexts. Attention is also given to the issues of social responsibility, ethics, and personal values. In this context, the course also examines the connection between organizational strategy and the physical environment. Finally, cases and assignments which require an analysis of organizational improvement strategies and new organizational structures are selected.

NOTE: Students who have received credit for COMM 310 may not take this course for credit.

COMM 499 *Seminar Course* (3 credits)

Prerequisite: To be determined each academic term. This course enables students, on an individual basis, to further focus on a specialized topic within their discipline.

61.40

ACCOUNTANCY

Faculty

Associate Professor and Chair of the Department
CHARLES DRAIMIN, PhD C'dia., CPA CA

Professors

MANMOHAN RAI KAPOOR, PhD *Tor.*, RIA/CMA
MICHEL MAGNAN, PhD *Wash.*, FCPA FCA
DOMINIC PELTIER-RIVEST, PhD *Flor.State*, CFE
JUAN J. SEGOVIA, PhD *Paris-Dauphine*

Associate Professors

IBRAHIM M. ALY, PhD *N.Texas State*
EMILIO BOULIANNE, PhD *HEC Montr.*, FCGA
KELLY GHEYARA, PhD *Okla.*, CA
MAJIDUL ISLAM, PhD *Moscow Inst.*, CGA
GEORGE K. KANAAN, PhD *Wis.(Madison)*
CLAUDINE MANGEN, PhD *Roch.*

Assistant Professors

SOPHIE AUDOUSSET-COULIER, PhD *Paris HEC*, CGA
LUO HE, PhD *Qu.*
DARLENE HIMICK, PhD *Calg.*
ELISABETTA IPINO, PhD *Padova (Italy)*
ELISABETH PELTIER WAGNER, PhD *C.U.N.Y.*
BYRON Y. SONG, PhD *H.K.Poly.*
LI YAO, PhD *Purdue*

Senior Lecturers

PATRICK DELANEY, BComm C'dia.
GAIL FAYERMAN, MBA *McG.*, CPA CA
TREVOR HAGYARD, BComm C'dia., CMA *Ill.*, CA CPA
TOMEK KOPCZYNSKI, BComm *McG.*, CMA
TARA RAMSARAN, MBA C'dia., CA CPA
WENDY NADINE ROSCOE, BComm C'dia., CPA CA

Lecturer

MERVAT SALEH, BComm C'dia., CPA CA

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
MB Building, Room: 014-205
514-848-2424, ext. 2764

Department Objectives

The Department of Accountancy is committed to remaining a national leader in accounting education through teaching, research and service.

Teaching: Providing a first-rate educational experience that prepares a diverse population of students for successful careers.

Research: Creating and disseminating knowledge of accounting-related issues through reputable channels.

Service: Providing expertise that enhances the well-being of the University, the accounting profession and society in general.

Programs

- 24 Major in Accountancy**
15 ACCO 310, 320, 330, 340, 400
9 additional credits offered by the Department
- 12 Minor in Assurance, Fraud Prevention and Investigative Services**
12 ACCO 350, 450, 455, 465
- 12 Minor in Financial Reporting**
6 ACCO 310, 320
6 additional credits offered by the Department
- 12 Minor in Management Accounting**
6 ACCO 330, 430
6 additional credits offered by the Department
-

Accountancy Co-operative Program

Director
TARA RAMSARAN, *Lecturer*
514-848-2424, ext. 2756

The Accountancy co-operative program is offered to students who are enrolled in the BComm program and are majoring in Accountancy.

The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Accountancy co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

ACCO 220 Financial and Managerial Accounting (3 credits)

This course provides an introduction to accounting principles underlying the preparation of financial reports with an emphasis on the relationship between accounting information and production decisions. It examines the relationship between costs, production volume, and profit, as well as the practical benefits of standard costs for planning and control purposes. The role of accounting information in various manufacturing decisions is also highlighted.

NOTE: This course would be useful to Engineering students.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who have received credit for ACCO 230, 240 may not take this course for credit.

ACCO 230 Introduction to Financial Accounting (3 credits)

This course provides an introduction to accounting concepts underlying financial statements of organizations. It focuses on the analysis, measurement, and reporting of business transactions to users of financial statements. It also examines the uses and limitations of accounting information for investment and credit decisions.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who receive a grade of "C" or better may be exempt from COMM 217.

NOTE: Students who have received credit for ACCO 220 may not take this course for credit.

ACCO 240 Introduction to Managerial Accounting (3 credits)

Prerequisite: ACCO 230. This course examines the role of accounting information for decision making, and focuses on concepts and techniques used in planning operations, controlling activities, and evaluating managerial performance. New developments are addressed with a focus on contemporary business issues and real-world applicability of management accounting concepts and techniques.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who receive a passing grade may be exempt from COMM 305.

NOTE: Students who have received credit for ACCO 220 may not take this course for credit.

ACCO 310 Financial Reporting I (3 credits)

Prerequisite: COMM 305 previously or concurrently. Intensive study is made of the theory and practice of external financial reporting by business organizations, focusing on concepts and procedures underlying the measurement of assets and the determination of income.

ACCO 320 Financial Reporting II (3 credits)

Prerequisite: ACCO 310. This course continues the intensive study of ACCO 310, with particular emphasis on accounting for liabilities, shareholders' equity, and other related topics such as earnings per share, pension accounting, and accounting for income taxes.

ACCO 330 Cost and Management Accounting (3 credits)

Prerequisite: COMM 305. This course provides an examination of the techniques, systems, and procedures applicable to the managerial use of accounting information for planning, decision-making, and control. Topics include cost accumulation and allocation, product and process costing, flexible budgeting and variance analysis, evaluation of managerial performance, and transfer pricing.

ACCO 340 Income Taxation in Canada (3 credits)

Prerequisite: COMM 217. This course provides core knowledge regarding the federal income tax structure and the Canadian goods and services tax system. It examines the taxation of employment, business, property income, capital gains and other sources of income for an individual.

ACCO 350 Accounting and Information Technology (3 credits)

Prerequisite: COMM 226 or 301, 305; ACCO 310. This course examines the role of computerized accounting information systems (AIS) in organizations. Students learn how to justify, design, and utilize AIS to provide pertinent information to managers for decision making. The course helps to identify appropriate usage of information technology in specific accounting contexts. Topics include e-business, computer fraud, information systems security and controls, systems analysis, and management of information technology.

ACCO 355 Analysis of Financial Statements (3 credits)

Prerequisite: COMM 305, 308. This course explores the usefulness and limitations of financial statements for investment and credit decisions. It focuses on the interpretation of the information contained in financial statements which reflect the economic characteristics of the firm and its strategic business decisions. Instruments and techniques for financial statement analysis are discussed and applied to case studies and actual companies.

NOTE: Students in the Accountancy Major may not take this course for credit.

NOTE: This course would be useful for students in Finance and Management.

ACCO 365 U.S. Federal Taxation (3 credits)

Prerequisite: COMM 217 or ACCO 230. This course familiarizes the student with individual and corporate taxation in the U.S. The use of professional judgment in the application of tax planning recommendations is also addressed in this course.

NOTE: Students who have received credit for this topic under an ACCO 470 number may not take this course for credit.

ACCO 400 Accounting Theory (3 credits)

Prerequisite: ACCO 320. This course examines the theoretical foundations of the contemporary approach to financial reporting, and the political and pragmatic considerations in the development of the conceptual framework underlying current accounting standards. Alternative theories of accounting are discussed and controversial areas are emphasized.

ACCO 410 Governmental and Not-for-Profit Accounting (3 credits)

Prerequisite: ACCO 320. This course introduces the theory and concepts that underlie the financial accounting, control, and reporting in not-for-profit organizations. General concepts and principles are illustrated by comparing the practices of selected not-for-profit organizations, including local and federal governments and universities, with authoritative standards.

ACCO 420 Financial Reporting III (3 credits)

Prerequisite: ACCO 320. This course examines the theory and practice of accounting for intercorporate investments, business combinations, consolidation of financial statements, and foreign currency transactions and operations.

ACCO 430 Advanced Management Accounting (3 credits)

Prerequisite: ACCO 330. The course examines the integrative and interdisciplinary role of management accounting and its contribution to the complex management process. The course focuses on cases that deal with strategic issues in management accounting and management's need for both quantitative and qualitative information for planning, control, performance evaluation and decision making.

ACCO 435 Integrative Management Accounting Cases (3 credits)

Prerequisite: ACCO 430. This course integrates topics in financial and management accounting, finance, and business strategy covered in previous courses. Emphasis is placed on topics of interest to students pursuing the Certified Management Accountant (CMA) designation. Cases are analyzed in individual and group settings using the methodology required for the CMA Case Examination.

NOTE: Students who have received credit for this topic under an ACCO 470 number may not take this course for credit.

ACCO 440 Advanced Taxation (3 credits)

Prerequisite: ACCO 340. This course provides core knowledge regarding the federal taxation of corporations, partnerships, and trusts. It introduces analytical skills needed to make decisions regarding various business transfers, combinations, incorporation and estate planning issues for corporations and shareholders.

ACCO 450 Assurance Services (3 credits)

Prerequisite: ACCO 320 previously or concurrently. This course examines the concepts and current standards of various assurance services, especially the audit of financial statements. It emphasizes the audit process and the role of the public accountant in expressing an opinion on the financial statements of an organization.

ACCO 455 Fraud Prevention and Investigation (3 credits)

Prerequisite: COMM 217, 315. This course examines the principles of and methodology used in fraud detection and deterrence. Topics covered may include skimming, cash larceny, cheque tampering, billing, payroll and expense reimbursement schemes, non-cash misappropriations, corruption, fraudulent financial statements, conducting investigations and interviewing witnesses. This course may also examine auditors' legal responsibilities towards fraud, the evaluation of internal controls and important pieces of legislation such as the Sarbanes-Oxley Act and the Criminal Code. Finally, the ethical aspects associated with fraud are discussed. Class sessions consist of lectures, real-life fraud case discussions and the presentation of DVDs from the Association of Certified Fraud Examiners.

NOTE: Students who have received credit for this topic under an ACCO 470 number may not take this course for credit.

ACCO 465 Advanced Assurance Services (3 credits)

Prerequisite: ACCO 450. This course covers important topics and concepts in auditing and assurance services. It builds on topics covered in ACCO 450 and introduces specialized and advanced topics that are of particular importance to professional accountants. In covering topics and their application, the course focuses on decision-making processes followed by auditors. The course embraces the requirements of the CA *Student Competency Map* for assurance and the CGA *Modules and Readings AU2*.

NOTE: Students who have received credit for this topic under an ACCO 470 number may not take this course for credit.

ACCO 470 Special Topics in Accounting (3 credits)

Prerequisite: Written permission of the Department. This course is intended to complement accounting courses taken previously or concurrently at the senior level. It provides an opportunity for more intensive study in one or more specific topics in accounting.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

ACCO 490 Seminar in Taxation (3 credits)

Prerequisite: ACCO 440. This course provides an in-depth coverage of taxation issues. It emphasizes the development of professional skills in the application of tax principles and concepts to the solution of complex tax problems facing individuals, trusts, and corporations.

Faculty

Professor and Chair of the Department
FASSIL NEBEBE, PhD *Qu.*

Professors

CLARENCE BAYNE, PhD *McG.*
ANNE-MARIE CROTEAU, PhD *Laval*
DALE DOREEN, PhD *Alabama*
JAMSHID ETEZADI-AMOLI, PhD *Tor.*
SURESH KUMAR GOYAL, MEng *Strath.*
GREGORY E. KERSTEN, PhD *Warsaw Sch.Econ.*
TAK KWAN MAK, PhD *W.Ont.*
DANIELLE MORIN, PhD *McG.*
AHMET SATIR, PhD *Manc.*

Associate Professors

ANNE BEAUDRY, PhD *Montr.*
MERAL BÜYÜKKURT, PhD *Indiana*
SATYAVEER CHAUHAN, PhD *INRIA Nancy*
DENNIS KIRA, PhD *Br.Col.*
CHITUANYA OKOLI, PhD *Louisiana State*
RAAFAT SAADE, PhD *C'dia.*
MAHESH SHARMA, MEng MBA *McG., Provost's Distinction*
RUSTAM VAHIDOV, PhD *Ga.State*

Assistant Professors

XIAO HUANG, PhD *S.Calif.*
NAVNEET VIDYARTHI, PhD *Wat.*

Lecturer

RAUL VALVERDE, PhD *S.Q'd.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
MB Building, Room: 012-115
514-848-2424, ext. 2982

Department Objectives

The Department of Decision Sciences and Management Information Systems prepares students with an integrated set of decision-making skills to meet the organizational and managerial needs of the business world.

The Major in Business Technology Management aims to equip students with knowledge and skills in information and communication technology, business process analysis, and project management. It prepares graduates for careers in various business technology areas such as information systems analysis and design, database administration, as well as management of information technology.

The Major in Supply Chain Operations Management aims to provide the knowledge and skills needed for planning and execution of end-to-end supply chains. It provides students with sufficient academic, technical and professional foundations that will enable them to pursue a challenging and rewarding career that covers planning, procurement, manufacturing, services, transportation, logistics and distribution, among others.

The Minor in Data Intelligence provides a knowledge base to complement the student's program at the John Molson School of Business. With training in data modelling, forecasting and data mining, students learn to build models for analyzing business problems that help organizations avoid risk and exploit opportunities.

Programs

24 Major in Supply Chain Operations Management

21 SCOM 361, 363, 372, 374, 492, 498; DESC 378

3 Chosen from BTM 382, 430, 480; SCOM 491

12 Minor in Supply Chain Operations Management

12 SCOM 361, 363, 372, 374

24 Major in Business Technology Management

18 BTM 380, 382, 480, 481, 495, 496

6 Chosen from BTM 387, 395, 430

12 Minor in Business Technology Management

12 BTM 380, 382, 481, 495

12 Minor in Data Intelligence

12 DESC 378, 445, 477, 478

Business Technology Management/Supply Chain Operations Management Co-operative Programs

Director

RAUL VALVERDE, *ETA Lecturer*

514-848-2424, ext. 2968

The Department of Decision Sciences and Management Information Systems offers two co-operative programs for students who are enrolled in the BComm program: Business Technology Management – BTM (for students majoring in BTM), and Supply Chain Operations Management – SCOM (for students majoring in SCOM).

The academic content of each co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

BUSINESS TECHNOLOGY MANAGEMENT

BTM 380 Introduction to Business Application Development (3 credits)

Prerequisite: COMM 226, 301. This course introduces students to the fundamentals of developing computer applications. Students gain knowledge and learn techniques necessary for building business applications, based on the modern object-oriented development paradigm. Students learn the principles of object-oriented programming using a contemporary language and integrated development environment. Topics include control structures, objects, classes, inheritance, class hierarchies, and polymorphism. Using appropriate business examples, this course enables students to solve business problems using the fundamentals of object-oriented programming.

NOTE: Students who have received credit for DESC 381 or 391 may not take this course for credit.

BTM 382 Database Management (3 credits)

Prerequisite: COMM 226 or 301. This course provides a comprehensive foundation for designing, building, and working with databases, enabling students to understand and use commercially available database products effectively. The course examines different models of representing data with emphasis on the relational model. Topics include data modelling, database design, queries, transaction management, implementation issues, and an overview of distributed database management systems, data warehouses, databases in electronic commerce, and database administration. Examples are drawn from various functional and operational areas including enterprise and supply chain operations, management, and planning.

NOTE: Students who have received credit for DESC 382 may not take this course for credit.

BTM 387 E-Business (3 credits)

Prerequisite: COMM 226 or 301. This course covers the essentials of how e-business is conducted and managed. Its major opportunities, limitations, risks, and issues for individuals, organizations, and society are discussed. Topics covered include e-business architectures, models, technologies, and privacy and security issues. Applications such as e-learning, e-government, and telemedicine are also discussed.

NOTE: Students who have received credit for DESC 387 may not take this course for credit.

BTM 395 *Internet Programming* (3 credits)

Prerequisite: BTM 380. This course covers the concepts and tools used in programming of business systems that require Internet connectivity. Methods and technologies used to build web-based systems including e-business, e-learning, and online meeting places are discussed. The course gives students the opportunity to learn about and use such technologies as scripting, interactive charting, and database connectivity.

NOTE: Students who have received credit for DESC 395 may not take this course for credit.

BTM 430 *Enterprise Resource Planning and Information Technology Integration* (3 credits)

Prerequisite: COMM 225, 226 or 301. This course responds to the demand for the integration of technological and business resources by providing the student with opportunities to understand and analyze practical business problems and processes via the use of enterprise resource planning (ERP) applications. Topics include analysis and design for information technology integration, implementation strategies, and use of ERP for process integration. Technological solutions examined include ERP software, middleware applications, and the use of web services.

NOTE: Students who have received credit for DESC 389, 420 or 430 may not take this course for credit.

BTM 480 *Project Management* (3 credits)

Prerequisite: COMM 225 or 226 or 301. This course covers the theory, tools, and techniques associated with the management of projects including the use of project management software. Cases from various business contexts are used to illustrate essential steps in setting up project plans, scheduling work, monitoring progress, and exercising control to achieve desired results. The course integrates the Project Management Body of Knowledge with the Project Management Institute's certification requirements.

NOTE: Students who have received credit for DESC 483 or for this topic under a DESC 490 number may not take this course for credit.

BTM 481 *Information Systems Analysis* (3 credits)

Prerequisite: COMM 226 or 301; BTM 480 or DESC 483 previously or concurrently. This course covers the first phase of the systems development life cycle, which culminates in the systems proposal. Topics include the preliminary survey, analysis of existing systems and identification of deficiencies, the development of functional specifications, feasibility and cost/benefit analysis and development of a recommended course of action. In addition, various diagramming techniques are examined.

NOTE: Students who have received credit for DESC 481 may not take this course for credit.

BTM 495 *Information Systems Design and Implementation* (3 credits)

Prerequisite: BTM 380 or DESC 381 or DESC 391; BTM 382 or DESC 382; BTM 481 or DESC 481. The main objective of this course is to expose students to the concepts, tools, and techniques they need to transform the information system requirements, resulting from the system analysis phase, into system design specifications, and to transform the information system design specifications, resulting from the system design phase, into a system prototype. The course introduces the concepts, techniques, and methodologies of the object-oriented approach to information system design. The unified modelling language is used to develop design specifications for the systems. Topics include design of use case models, classes and class diagrams, interaction diagrams, and state chart diagrams.

NOTE: Students who have received credit for DESC 495 may not take this course for credit.

BTM 496 *Information Technology Strategy, Management, and Sourcing* (3 credits)

Prerequisite: BTM 481 or DESC 481. This course addresses issues involved in administering the activities related to information technology (IT) resources in an organization. Topics covered include IT strategy, governance, sourcing, architecture, risk management, security policies, resource allocation, and change management. The course also covers areas related to the external environment of an organization such as the IT industry evolution, scanning, and its emerging solutions.

DECISION SCIENCES

DESC 200 *Fundamentals of Information Technology* (3 credits)

This course covers topics in information and communications technologies, including software, hardware, the Internet, and office productivity applications. Students learn about the technologies and their use, as well as acquire hands-on experience in key software applications.

NOTE: Students who have received credit or exemption for INTE 290, or for this topic under a COMM 499 number or equivalent, may not take this course for credit.

NOTE: Students enrolled in Mathematics and Statistics programs may not take this course for credit.

DESC 378 *Statistical Models for Data Analysis* (3 credits)

Prerequisite: COMM 215. This course introduces and examines the role of contemporary statistical methods in improving business and industrial processes. The methodologies selected for discussion represent those that are most extensively used in contemporary business studies and analyses. The topics covered include modern statistical thinking, linear regression analysis, logistic regression, and experimental methods in product and process designs. The course involves mostly analyses of real-life data using statistical software packages. The understanding of the rationale of the methodologies introduced is also emphasized.

NOTE: Students who have received credit for DESC 376 may not take this course for credit.

DESC 445 *Statistical Software for Data Management and Analysis* (3 credits)

Prerequisite: COMM 215 or equivalent. This course presents the principles and techniques of widely used statistical software systems, such as SAS, for data management (information storage and retrieval), data modification, file handling, and statistical

analysis and reporting. The course covers special features such as graphics, macro languages, software and/or library interfacing and the basics of data mining. Classes are to be held in computer labs and half of the time is devoted to lab work.

NOTE: Students who have received credit for STAT 480 may not take this course for credit.

DESC 477 *Managerial Forecasting* (3 credits)

Prerequisite: COMM 215 or equivalent. Reliable managerial forecasts of business variables must often be obtained against a background of structural changes in markets. This course focuses on the theory and applications of the most widely used methods of forecasting including decomposition methods, exponential smoothing, and the Box-Jenkins (ARIMA Building) techniques for non-seasonal and seasonal modelling. Recent approaches in forecasting such as artificial neural networks are also introduced. Business and economic databases are analyzed using statistical software packages in both class and project assignments.

NOTE A/See §200.2

DESC 478 *Data Mining Techniques* (3 credits)

Prerequisite: DESC 378 or permission of the Department. The course covers essential ideas and techniques for extracting information from large amounts of data. It discusses both supervised and unsupervised methods, and covers topics such as dimension reduction, multiple regression, logistic regression, discriminant analysis, classification and regression trees, neural networks, association rules, cluster analysis and multi-dimensional scaling. Illustrations of the concepts and methods are given, and students gain practical experience in data mining with the use of popular data mining software.

DESC 490 *Special Topics in Decision Sciences and Management Information Systems* (3 credits)

Prerequisite: Permission of the Department. This course allows for more intensive examination of one or more topics in production/operations management, operations research, business statistics or management information systems.

SUPPLY CHAIN OPERATIONS MANAGEMENT

SCOM 361 *Management Science Models for Operations Management* (3 credits)

Prerequisite: COMM 225. This course deals with application of management science models to operations management problems in allocation of scarce human, physical, and financial resources. Among the topics covered are transportation, assignment and trans-shipment problems, integer linear programming, network models, multi-criteria decision problems, and waiting line models. The emphasis is on modelling issues and interpretation of solution through the use of optimization software packages.

NOTE: Students who have received credit for DESC 361 may not take this course for credit.

SCOM 363 *Product Design and Business Process Re-Engineering* (3 credits)

Prerequisite: COMM 225 previously or concurrently. This course combines the product/service design issues and the continuous improvement efforts required throughout the life cycle of products and services. The topics covered in this context include essentials of creativity, organizational and operational issues in product/service design, mass customization, business process re-engineering, layout, and quality management. Cases and enterprise resource planning applications are studied to provide a unifying theme in terms of organizational change, supply chain re-engineering and integration aspects.

NOTE: Students who have received credit for DESC 363 may not take this course for credit.

SCOM 372 *Supply Chain Planning and Control* (3 credits)

Prerequisite: SCOM 361 or DESC 361. Production/service planning and control issues in managing supply chains are covered in this course. Mathematical modelling is emphasized in dealing with facility location, capacity planning, demand and supply management, aggregate planning, scheduling, and inventory management decisions. Supplier evaluation/development practices and outsourcing are studied. Relevant enterprise resource planning modules with advanced planning and scheduling functionalities are introduced to illustrate the integration and coordination issues in supply chain planning and control.

NOTE: Students who have received credit for DESC 372 may not take this course for credit.

SCOM 374 *Supply Chain Logistics* (3 credits)

Prerequisite: COMM 225. This course covers the tools and techniques associated with movement of materials throughout the supply chain. The topics covered include fundamentals of customer relationship management, distribution channels, purchasing, warehousing, transportation management, third part logistics, reverse logistics and issues in global logistics. Relevant enterprise resource planning modules are introduced and logistics games are played to illustrate the integration and coordination issues in supply chain logistics.

NOTE: Students who have received credit for DESC 374 may not take this course for credit.

SCOM 491 *Supply Chain Risk Management* (3 credits)

Prerequisite: COMM 225. This course covers fundamental quantitative and qualitative tools of risk management used to mitigate against supply chain risks in the context of supply and demand management strategies. Globalization initiatives in trade and money markets and increased worldwide security concerns have exposed supply chains to ever-increasing risks. Consequently, risk management along the supply chain has become an important function in order to decrease the level of vulnerability for the stakeholders. Topics include review of supply chain fundamentals and principles, risk identification and management, trade-offs in risk management, supply chain strategies for robustness, and scenario planning. Various case studies are used to highlight design and implementation issues.

NOTE: Students who have received credit for DESC 491 may not take this course for credit.

SCOM 492 *Supply Chain Simulation* (3 credits)

Prerequisite: DESC 378; SCOM 372 or DESC 372 or SCOM 374 or DESC 374 previously or concurrently. This course focuses on simulating various supply chain scenarios using supply chain simulation package(s). Modelling issues in simulation are covered. Experimental design and analysis techniques are used in designing scenarios and analyzing the outcomes, which are also studied from a wider strategic business perspective.

NOTE: Students who have received credit for DESC 492 may not take this course for credit.

SCOM 498 *Supply Chain Project* (3 credits)

Prerequisite: SCOM 372 or DESC 372 or SCOM 374 or DESC 374 previously or concurrently. This course involves a project carried out in a real-life setting. Guest speakers from industry are invited to present supply chain issues in practice. Various tools and techniques of supply chain operations management are used in identifying and analyzing supply chain problems. Improvements and solutions are designed along with appropriate performance metrics.

NOTE: Students who have received credit for DESC 498 may not take this course for credit.

61.60

ECONOMICS

Location

Sir George Williams Campus
Hall Building, Room: H 1155
514-848-2424, ext. 3900

Programs

For departmental information please see §31.080.

24 Major in Economics

- 12 ECON 301, 302, 303, 304
- 12 ECON elective credits chosen at the 400 level

12 Minor in Economics

- 6 ECON 318, 319
 - 6 ECON elective credits chosen at the 300 level
-

61.70

FINANCE

Faculty

Associate Professor and Chair of the Department

THOMAS WALKER, PhD *Wash.State, Laurentian Bank Professor in Integrated Risk Management*

Professors

ABRAHAM BRODT, PhD N.Y., *Director, Kenneth Woods Portfolio Management Program*

ALAN HOCHSTEIN, PhD *McG.*

ARVIND JAIN, PhD *Mich.*, *Academic Director, International Business Program*

LAWRENCE KRYZANOWSKI, PhD *Br.Col.*, *Concordia University Research Chair in Finance*

STYLIANOS PERRAKIS, PhD *Calif.(Berkeley)*, *Provost's Distinction, RBC Professor in Financial Derivatives*

LATHA SHANKER, PhD *Flor.*

LORNE SWITZER, PhD *Penn.*, *Van Berkomp Chair in Small-Cap Equities, and Associate Director, Institute for Governance in Private and Public Organizations*

Associate Professors

ARSHAD AHMAD, PhD *McG.*, *Provost's Distinction*

NILANJAN BASU, PhD *Purdue*, CFA

SANDRA BETTON, PhD *Br.Col.*, CFA

HARJEET BHABRA, PhD *Missouri-Columbia*, *Associate Dean, Research and Research Programs*

SERGEY ISAENKO, PhD *Penn.*

GREGORY LYPNY, PhD *Tor.*

IMANTS PAEGLIS, PhD *Boston*

YAXUAN QI, PhD *Rutgers*, *Manulife Financial Professor in Financial Planning*

IAN RAKITA, PhD *C'dia.*, CFA, *Director, Goodman Institute of Investment Management*

KHALED SOUFANI, PhD *Nott.*, *Director, Desjardins Centre for Innovation in Business Finance*

Assistant Professors

FREDERICK DAVIS, PhD *Qu.*

RAVI MATETI, PhD *Conn.*

DAVID NEWTON, PhD *Br.Col.*

RAHUL RAVI, PhD *Alta.*

SAIF ULLAH, PhD *Alta.*

YUAN WANG, PhD *Penn.State*

Senior Lecturer

JAY MANNADIAR, MBA *McG.*, *Director, Finance Co-op*

Lecturers

ANAS ABOULAMER, MScAdmin *C'dia.*

REENA ATANASIADIS, MBA *C'dia.*

LORETTA HUNG, MScAdmin *C'dia.*

RAAD JASSIM, MEng *McG.*

EDWARD WONG, MBA *W.Ont.*, CA CFA

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

MB Building, Room: 012-205

514-848-2424, ext. 2789

Department Objectives

The Department of Finance is committed to excellence in both research and teaching and has earned a solid reputation as a productive and research oriented academic unit. The Department's research activities include theoretical, empirical, and applied contributions — all aimed at furthering knowledge in the field. Its teaching activities cover a wide range of topics including corporate finance, investment, international finance, personal finance, optimization techniques, portfolio management, options and futures and fluctuations in security prices, exchange rates, and interest rates.

Teaching effectiveness represents the cornerstone of the Department's teaching objectives. The Department's curriculum is a dynamic one which keeps up with current trends and innovations in the financial area. Department members have been recognized not only with Faculty Teaching Awards but also internationally by winning the 3M Teaching Fellowship Award. The Department has developed orientation and training programs with major corporations and financial institutions for its students. Through this type of external involvement, classroom teaching is effectively blended with the complexities of the real world thereby providing students not only with a more meaningful education but also with job opportunities.

Programs

30 Honours in Finance

- 3 FINA 385
- 3 FINA 395
- 18 additional 400-level credits offered by the Department
- 6 FINA 495

Students are eligible to apply to the honours program if they have completed FINA 385, FINA 395, and six additional credits in Finance. Applicants must have achieved a minimum cumulative GPA of 3.3 and a minimum GPA of 3.5 in their Finance courses. Enrolment in this program is limited. The selection process may include recommendations from faculty members as well as interviews of applicants to this program. The deadline for applications is March 1.

24 Major in Finance

- 3 FINA 385
- 3 FINA 395
- 18 additional 400-level credits offered by the Department

12 Minor in Finance

- 3 FINA 385
 - 3 FINA 395
 - 6 additional 400-level credits offered by the Department
-

Finance Co-operative Program

Director

JAY MANNADIAR, *Senior Lecturer*
514-848-2424, ext. 2919

The Finance co-operative program is offered to students who are enrolled in the BComm program and are majoring in Finance. The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Finance co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

FINA 200 Personal Finance (3 credits)

This course is offered online. It is designed to help individuals better manage their current and future financial affairs. The course introduces the terminology and basic concepts underlying personal financial management. It helps students set goals and develop skills to conduct basic research when making personal financial decisions. The topics covered include financial planning, money management, personal income taxes, costs of consumer credit, concepts of time value of money, investing in stocks, bonds and mutual funds, mortgages, and retirement planning.

NOTE: Finance Majors and Minors may not take this course for credit towards their major or minor.

NOTE: Students who have received credit for this topic under a COMM 499 number may not take this course for credit.

FINA 210 Introduction to Real Estate (3 credits)

This course introduces the concepts, principles, analytical methods and tools used for investment, development, and evaluation of real estate assets. The course focuses on issues such as market and feasibility analysis, investment property analysis, forms of ownership, valuation by alternate approaches, mortgages, borrower-lender relationships, investing in income property, commercial property financing, real estate investment trusts (REITs), and legal and property rights among co-owners.

NOTE: Finance Majors and Minors may not take this course for credit towards their major or minor.

NOTE: Students who have received credit for FINA 450 or for this topic under a COMM 499 number may not take this course for credit.

FINA 370 (also listed as IBUS 370)**International Financial Management (3 credits)**

Prerequisite: COMM 220, 308. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate systems, short- and long-term investment and borrowing decisions, euro-currency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm.

NOTE: Finance Majors and Minors may not take this course for credit toward their major or minor.

NOTE: Students who have received credit for IBUS 370 or FINA 470 may not take this course for credit.

FINA 385 Theory of Finance I (3 credits)

Prerequisite: COMM 220, 308. This course is the first of two that provide a theoretical foundation upon which subsequent 400-level courses will be built. The course examines the allocation of capital in financial markets and the determination of the relative prices of financial assets. Topics covered include utility theory, arbitrage pricing theory, and asset pricing models such as the Capital Asset Pricing Model and the option pricing model. Applications explored include arbitrage, the design of markets and the appropriate responses of individuals and firms to changes in market conditions as well as to market imperfections.

NOTE: Students who have received credit for FINA 380 may not take this course for credit.

FINA 395 Theory of Finance II (3 credits)

Prerequisite: COMM 220, 308; FINA 385 previously or concurrently. This course focuses on the financial theory of the firm and examines the Modigliani-Miller propositions, agency theory, and asymmetric information theory. Topics covered include capital structure and the cost of capital, investment and financing decisions, real options, valuation and issuance of new securities, mergers and acquisitions, and leveraged buyout decisions.

NOTE: Students who have received credit for FINA 390 or 400 may not take this course for credit.

FINA 402 Short-Term Financial Management (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course is concerned with the key aspects of short-term financial management. It begins with a brief coverage of the institutional environment facing the financial manager in Canada. A detailed coverage of sources for short-term borrowing and investments is presented. The structure of the Canadian financial system along with a description of the various methods of effecting payments as well as the clearing and settlement system are covered. Topics in overall liquidity management are briefly reviewed from a theoretical perspective. Traditional subjects in cash management such as collections, disbursement and control, forecasting, company bank relationship, short-term investment, and borrowing are examined next. Such new developments as electronic data interchange and EFT/POS are also examined. The course also provides a coverage of trade credit both from a theoretical positive standpoint and a normative viewpoint.

FINA 405 Cases in Finance (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course uses case discussions to focus on the application of the principles of finance learned in FINA 385 and 395 in real-world contexts. Cases cover topics in corporate finance, investments, and financial markets and institutions. *NOTE A/See §200.2*

NOTE: Students who have received credit for FINA 490 may not take this course for credit.

FINA 410 Investment Analysis (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course is devoted to an examination of the investment decision, both from the viewpoint of the individual investor and the institutional investor. The course examines valuation of different financial instruments such as treasury bills, bonds, common stocks, preferred stocks, options, warrants, convertibles, rights, commodity and financial futures, mutual funds, and pension funds. The use of different instruments in various investment strategies such as investment, speculation, hedging, and arbitrage are also examined. Techniques examined by analysts to pick investments such as fundamental analysis, technical analysis, and quantitative analysis are studied. *NOTE A/See §200.2*

FINA 411 Portfolio Management (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course focuses on modern investment theory and its application to the management of entire portfolios. Topics include: a) construction of optimal asset portfolios using techniques such as the single index model, b) extensions of the capital asset pricing model and tests (e.g. the zero-beta model), c) criteria for evaluation of investment performance, d) active vs. passive portfolio management, e) portfolio insurance, and f) market efficiency. A computer exercise is assigned to illustrate the application of the theory. *NOTE A/See §200.2*

FINA 412 Options and Futures (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course is a comprehensive analysis of the options and futures markets in North America. The student is introduced to the different markets for these instruments and their institutional details. The different types of options and futures currently trading are examined. The principles of valuation of futures and options, their use in risk management through hedging techniques and their use in speculative strategies are studied. Emphasis is placed on the analysis of financial options and futures.

FINA 413 *Advanced Topics in Derivative Markets* (3 credits)

Prerequisite: FINA 412. This course focuses on advanced topics in the area of derivatives. Topics covered include the valuation of derivatives using numerical procedures and martingales, modelling the term structure of interest rates, valuation of interest rate swaps, interest rate options, caps, floors, swaptions and exotic options, and application of derivatives in risk management such as value at risk models, estimation of volatility and credit risk derivatives.

FINA 415 *Mergers and Acquisitions* (3 credits)

Prerequisite: FINA 380 or 385; FINA 390 or 395. This course examines the financial aspects of mergers and acquisitions. Basic financial theory and empirical evidence related to corporate control activity is discussed. Some of the topics covered include target identification and valuation, bidding strategies, defensive strategies, financing strategies and growth by acquisition strategies. In addition, going private transactions such as leverage buyouts and management buyouts are discussed.

FINA 416 *Behavioural Finance* (3 credits)

Prerequisite: FINA 385, 395. This course examines how the behaviour of managers, boards of directors, or financial analysts deviates from models of "rational" behaviour in some situations, and how these deviations affect shareholder wealth. The course explores how behavioural characteristics like mental accounting, overconfidence, herding, framing and loss aversion cause the assumptions of rational economic behaviour to break down at both the individual and systemic levels.

NOTE: Students who have received credit for this topic under a FINA 455 number may not take this course for credit.

FINA 450 *Real Estate Investment and Finance* (3 credits)

Prerequisite: FINA 385, 395. This course deals with the central issues in real estate finance and investment, and with recent advances in the field. Students are introduced to basic topics such as the organization of real estate markets, pricing, inflation, taxation, valuation methods, brokerage, ownership forms, and real estate law. In addition, they study recent advances in finance as they apply to the concept of real estate valuation. Principles learned in FINA 385 and 395, and in academic journals serve as the basis for this aspect of the course.

NOTE: This course is offered for Finance Majors and Minors only.

NOTE: Students who have received credit for FINA 210 may not take this course for credit.

FINA 455 *Seminar in Finance* (3 credits)

This course is intended primarily for Finance Majors and Minors. It provides an opportunity for more intensive study in one or more specific topics of finance. The topic varies according to the special interests of the professor and the students. Enrolment is restricted and is subject to departmental approval. *NOTE A/See §200.2*

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

FINA 465 *Trading in Financial Securities* (3 credits)

Prerequisite: FINA 412; permission of the Department. This course focuses on developing practical skills in trading financial securities. Topics covered include general trading practices, fundamental and technical analysis, term structure of interest rates, arbitrage opportunities, and trading strategies using options, futures and options on futures contracts. Speakers from the finance industry are also invited to share their experiences with the students.

NOTE: Students who have received credit for this topic under a FINA 455 number may not take this course for credit.

FINA 470 *International Finance* (3 credits)

Prerequisite: FINA 385, 395. This course introduces students to the essentials of international financial management. After a brief introduction to the international monetary system, we study the organization of the foreign currency and international financial markets. The course then discusses the determinants of exchange rates, followed by a discussion of the risks that businesses operating in international markets face due to changing exchange rates and financial turmoil in international financial markets. The subsequent sections of the course are devoted to understanding techniques and strategies for managing different types of exchange risks after various foreign currency derivatives — forward, futures, options and swaps — have been studied.

NOTE: This course is offered for Finance Majors and Minors only.

NOTE: Students who have received credit for FINA 370 or IBUS 370 may not take this course for credit.

FINA 471 *Multinational Financial Management* (3 credits)

Prerequisite: FINA 470. This course addresses advanced issues that corporations or investors face when they expand their operations in the international markets. Corporations face challenges in the areas of international capital budgeting, determining their cost of capital and their capital structure, assessment of political risk, international working capital management, financing international trade and international corporate governance. This course discusses how these decisions become more complex in an international environment due to changing exchange rates and multiplicity of economic and political environments. The course also addresses the difficulties of choosing appropriate pricing models in an international context.

FINA 481 *Management of Financial Institutions* (3 credits)

Prerequisite: FINA 385, 395. This course provides students with an integrating framework for examining various types of financial institutions and the means of managing their operations. Topics include uniqueness of financial institutions; application of portfolio and corporate finance theories to the management of assets, liabilities, capital structure and off-balance sheet operations; interest rate and liquidity risk exposure; loan portfolio management, loan pricing and credit rationing; capital adequacy and regulatory environment. The strategic repercussions for such institutions, given the rapidly changing financial and regulatory environments, are also reviewed through the analysis of cases illustrating current issues.

NOTE: Students who have received credit for FINA 480 may not take this course for credit.

FINA 482 *International Banking: Operations, Policy and Strategy* (3 credits)

Prerequisite: FINA 481 previously or concurrently. This course provides students with an integrating framework to understand the risks, challenges and opportunities that banks face in their global operations. The course covers both commercial and investment banking activities in mature as well as emerging markets. The course begins with an examination of opportunities that foreign markets offer as well as difficulties that banks face when dealing with unfamiliar economic and political environment abroad. This is followed by a discussion of banking operations in international and foreign markets. Topics for this discussion may include microfinance, international loans, project financing and assessment of political or sovereign risks. The impact of foreign operations on mitigation or enhancement of various risks associated with home country operations is examined. The course also examines the importance of global regulation as well as governance and ethical issues associated with international banking.

FINA 495 *Honours Seminar in Finance* (6 credits)

Prerequisite: Enrolment in the honours program. This seminar is offered to honours students in Finance over a period of two terms. In the first term, the seminar covers methodology and recent advances in research in topics covered in the Finance curriculum. In addition, students begin working on a thesis/project to be conducted under the supervision of a faculty member. In the second term, students complete their thesis/project and are required to submit a written report to be presented at the seminar at the end of the term.

Program Director
ARVIND JAIN, PhD Mich.

Location

Sir George Williams Campus
MB Building, Room: 004-201
514-848-2424, ext. 2721

Program Objectives

The globalization of business is increasing the demand for managers who are comfortable working in a variety of diverse and multicultural environments. The Major in International Business is an attractive and exciting preparation for such a career. International business issues are examined from a strategic perspective and students are also exposed to several disciplines including international management, marketing, and finance, as well as international aspects of politics, economics, and sociology.

Students are strongly encouraged to enrol in language courses as elective courses. Adding a minor in a more specific discipline of interest is also suggested to further complement this program.

Participation in the International Student Exchange Program is also highly recommended. This experience will add a more relevant and unique perspective to the overall scope of this exciting degree.

Programs

24 Major in International Business

9 IBUS 462, 466, 492

15 additional credits chosen from courses listed in either Group A or Group B, with a maximum of six credits from Group B

Group A

IBUS 370, 465, 471, 493; MANA 299

Group B

ECON 319; POLI 305, 311, 315, 394

12 Minor in International Business

9 IBUS 462, 466, 492

3 additional credits chosen from IBUS 370, 465, 471, 493; MANA 299

International Business Co-operative Program

Director
ARVIND JAIN, *Professor*
514-848-2424, ext. 2939

The International Business co-operative program is offered to students who are enrolled in the BComm program and are majoring in International Business.

The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the International Business co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

IBUS 370 (also listed as FINA 370) International Financial Management (3 credits)

Prerequisite: COMM 308. This course is designed for students to acquire and demonstrate knowledge of the fundamental principles and issues in international financial management. It covers such topics as foreign exchange markets, exchange rate behaviour, structure and meaning of the international balance of payments, the functioning of fixed and floating exchange rate

systems, short- and long-term investment and borrowing decisions, euro-currency markets, foreign exchange risk management, and capital budgeting decisions for overseas investment. In sum, the topics are covered from the perspective of an individual who wishes to know how the international financial environment will affect the firm.

NOTE: Students who have received credit for FINA 370 may not take this course for credit.

IBUS 462 (also listed as MARK 462) Environment of World Business (3 credits)

Prerequisite: COMM 210, 215; COMM 223 or 224. This is a foundation course in international business; the objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in analyzing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada.

NOTE: Students who have received credit for MARK 462 may not take this course for credit.

IBUS 465 (also listed as MARK 465) International Marketing Management (3 credits)

Prerequisite: COMM 223 or 224; MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programs. Students execute a project directed to a selected part of the world.

NOTE: Students who have received credit for MARK 465 may not take this course for credit.

IBUS 466 (also listed as MANA 466) Management of Multinational Corporations (3 credits)

Prerequisite: COMM 222; MARK 462 or IBUS 462. This course introduces the challenges of managing sustainable multinational operations. It addresses themes of globalization and issues in managing global competition and local responsiveness in multiple institutional and cultural environments. The course gives students an appreciation of international competitive and collaborative strategies and the corresponding coordination and control mechanism of multinational corporations. It also highlights the issues of global governance and social responsibility as well as the differences and similarities of management techniques across national borders. Finally, the course examines the future of multinational corporations in the context of global financial, social, and environmental crises.

NOTE: Students who have received credit for MANA 466 may not take this course for credit.

IBUS 471 Topics in International Business (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course is intended primarily to provide an opportunity for more intensive study in one or more specific topics of international business. The topic will vary according to the special interests of the professor and the students.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

IBUS 492 (also listed as MARK 492) Cross-Cultural Communications and Management (3 credits)

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.

NOTE: Students who have received credit for MARK 492 may not take this course for credit.

IBUS 493 (also listed as MANA 493) International Business Law (3 credits)

Prerequisite: COMM 315; IBUS 466 or MANA 466. This course familiarizes business students with the principles of international private and public law that they may encounter in today's fast-paced world of multinational corporations and global business transactions. Topics include international trade organizations and treaties; principles relating to international sales contract performance and dispute resolution alternatives; international payment using bills of exchange and letters of credit; labour in a global economy including child labour and human trafficking issues; international environmental law, waste disposal and pollution issues; as well as the protection of intellectual property rights.

NOTE: Students who have received credit for MANA 493 may not take this course for credit.

61.90

MANAGEMENT

Faculty

Professor and Chair of the Department

LINDA DYER, PhD *Carnegie-Mellon*

Professors

STEVEN H. APPELBAUM, PhD *Ott.*, *Provost's Distinction*

KAMAL ARGHEYD, DBA *Harv.*

STÉPHANE BRUTUS, PhD *Bowling Green State*

MICK CARNEY, PhD *Brad.*

A. BAKR IBRAHIM, PhD *C'dia.*, CA RIA/CMA

MUHAMMAD JAMAL, PhD *Br.Col.*

GARY JOHNS, PhD *Wayne State*, *Provost's Distinction*

RICK MOLZ, PhD *Mass.*

ROBERT J. OPPENHEIMER, PhD *Tor.*

PAUL SHRIVASTAVA, PhD *Pitt.*

Associate Professors

KATHLEEN BOIES, PhD *W.Ont.*

ISABELLE DOSTALER, PhD *Camb.*

MEHDI FARASHAHI, PhD *C'dia.*

RONALD FERGUSON, PhD *Mich.*

MARYLÈNE GAGNÉ, PhD *Roch.*

TRACY HECHT, PhD *W.Ont.*

KAI LAMERTZ, PhD *Tor.*

TERRI LITUCHY, PhD *Ariz.*

ULRICH WASSMER, PhD *ESADE (Barcelona)*

Assistant Professors

DEVASHEESH BHAVE, PhD *Minn.*

YU-PING CHEN, PhD *Wis.*

ABDULRAHMAN CHIKHOUNI, PhD *C'dia.*

ALEXANDRA DAWSON, PhD *Bocconi (Italy)*

YOUNG-CHUL JEONG, PhD *Minn.*

ALEXANDRU LEFTER, PhD *Minn.*

ALEXANDRA PANACCIO, PhD *HEC Montr.*

RAYMOND PAQUIN, DBA *Boston*

JISUN YU, PhD *Minn.*

Senior Lecturers

TIMA PETRUSHKA-BORDAN, MA *McG.*

BARBARA SHAPIRO, MSS *Bryn Mawr*

Lecturers

RONALD J. ABRAIRA, MBA *C'dia.*

MELANIE BRIAND, MSc *C'dia.*

FRANK CROOKS, LLB LLL *Ott.*, MA *C'dia.*

AARON DRESNER, MBA *McG.*

TIM FIELD, MBA *C'dia.*

MICHEL GREICHE, MSc *L.S.E. Lond.*

ADRIANE PORCIN, DEA *Perpignan-Via Domitia*

ADEL RAPHAEL, MBA *C'dia.*

POUYA SEIFZADEH, MScA *Tehran*, MBA *Sharif Tech.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
MB Building, Room: 013-115
514-848-2424, ext. 2924

Department Objectives

The 21st century requires citizens and organizational leaders who can motivate and work with people, manage the complexities of organizations and their environments, and create wealth in a socially and ecologically sustainable manner. To prepare students for the challenges set by these diverse forces, the Management Department provides a curriculum that reflects the multidisciplinary nature of management and the interdependence among people, organizations, and society. Specific areas of study include organizational behaviour, business strategy, human resource management, entrepreneurship, and business law. The Department employs an applied pedagogy, focusing on experiential learning, case analysis, and oral and written reflections.

Programs

24 Major in Management

- 6 MANA 341, 420
- 18 Additional 300- or 400-level credits offered by the Department; IBUS 492

12 Minor in Management

- 6 MANA 341, 420
- 6 Additional 300- or 400-level credits offered by the Department

24 Major in Human Resource Management

- 18 MANA 362, 366, 420, 446, 463, 479
- 6 Additional credits chosen from MANA 443, 444, 445, 498

12 Minor in Human Resource Management

- 3 MANA 362
- 9 Credits chosen from MANA 443, 444, 446, 463, 498

12 Minor in Entrepreneurship

- 12 Credits chosen from MANA 447, 451, 478, 480, 481, 482
-

Management Co-operative Program

Director

BARBARA SHAPIRO, *Senior Lecturer*
514-848-2424, ext. 2780

The Management co-operative program is offered to students who are enrolled in the BComm program and are majoring in Human Resource Management.

The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Management co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

MANA 201 Introduction to Business and Management (3 credits)

This course introduces students to the basic principles of management within a contemporary business context. The managerial process (e.g. planning, organizing, controlling, motivating) is explored in relation to issues such as ethical behaviour, the environment, global and economic forces as well as political, legal, and cultural changes. In addition to using basic readings in management, the course also relies on contemporary text from the newspaper and business publications to raise students' awareness of contemporary issues in business and develop the business knowledge and skills that will be applicable in their career.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who have received credit for MANA 266 or COMM 210 may not take this course for credit.

MANA 202 Human Behaviour in Organizations (3 credits)

This course seeks to give students an understanding of behaviour in the workplace from an individual, group, and organizational perspective. Conceptual frameworks, case discussions, and self-assessment tools complement the course material. Topics include motivation, personality, job satisfaction, group dynamics, leadership skills, power and influence, managing change, diversity, and organizational culture.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who have received credit for MANA 213 or COMM 222 may not take this course for credit.

MANA 298 Business Law (3 credits)

This course allows students to develop a degree of familiarity with the legal environment in which business organizations operate. Students are introduced to the topics of employment law, the Quebec Charter of Human Rights, representation and power of attorney, corporate law, contract law, civil liability and product safety, as well as other important legal aspects of business.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who have received credit for MANA 211 may not take this course for credit.

MANA 299 Sustainable Management (3 credits)

This course focuses on the emerging business environment, and how organizations implement ecologically, socially, and economically sustainable management. Sustainable strategies are explored within the context of global economic development, to develop organizational vision, products and processes for achieving long-term sustainable prosperity.

NOTE: Students who have received credit for this course under a COMM 299 number may not take this course for credit.

MANA 300 Entrepreneurship: Launching Your Business (3 credits)

Prerequisite: Completion of 60 credits in a non-business program. This final-year course offers students the opportunity to learn how to capitalize on their domain-specific knowledge and recognize opportunities for self-employment or new venture creation. The course assumes no background courses in business, but presumes that students have already developed an interest in entrepreneurial careers within their respective fields of study. The first phase of the course exposes fundamental concepts and issues in entrepreneurship and related business fields. The second phase introduces students to the elements of business planning in the context of entrepreneurial projects, followed by the third phase where students formulate their own business plans.

NOTE: JMSB students may not take this course for credit.

NOTE: This course does not count toward the requirements of the Minor in Business Studies.

MANA 341 Organization Theory and Design (3 credits)

Prerequisite: COMM 222. This course provides the student with a basis for understanding and critically examining complex organizations in contemporary society. Interrelationships among the social, cultural, and formal properties of organizations are examined and linked to contextual forces in the external environment. Emphasis is placed on the analysis of organizational systems for the purpose of improving integration, adaptation, survival, and effectiveness of organizations.

MANA 343 Negotiation and Conflict Resolution (3 credits)

Prerequisite: COMM 222; or MANA 201 and 202. This course develops an understanding of the art and science of negotiation and conflict resolution. Students learn to analyze conflicts, understand the dynamics between parties, consider alternative approaches and determine the appropriate approach for specific circumstances. The course combines theory and practice and relies on role play and simulations to support students' understanding of their current and preferred approaches to conflict management and negotiation.

MANA 362 Human Resource Management (3 credits)

Prerequisite: COMM 222; or MANA 201 and 202. This course provides a background in the theory and practice of human resource management. It covers the core areas of human resource management, mainly human resource planning, recruitment, staffing, performance appraisal, career planning, labour relations, compensation, and international human resource management.

NOTE A/See §200.2

MANA 366 Industrial Relations and Collective Bargaining (3 credits)

Prerequisite: COMM 222. This course provides a broad overview of the employee-employer relationship. It describes the interplay between the various actors of industrial relations: unions, employees, employers, government, and legislators. The course focuses on major labour-management issues and the day-to-day problems of negotiating and administering collective agreements.

MANA 369 Business and Sustainability (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course explores the role of business in developing a sustainable global society. Students explore current environmental and societal concerns and the role of business in influencing them. Students learn how the relationships between business and various stakeholders, including communities, governments, and the natural environment, can create opportunities for generating economic, environmental, and social value.

MANA 420 Management Research for Decision Making (3 credits)

Prerequisite: COMM 222, 215. This course explains the relevance of management research for business and administrative decision making. Topics include conducting employee surveys, observational and interview methods, program evaluation, data analysis and interpretation, and the ethics of gathering information from human participants. Students evaluate the validity of reports of management research, learn to exercise caution in accepting research conclusions, and get hands-on experience with basic research techniques.

MANA 443 Compensation and Benefits Management (3 credits)

Prerequisite: MANA 362. This course provides a general knowledge of the concepts, design, methodology, management and administration of compensation and benefit programs within organizations. Major topics include job evaluation, knowledge-based pay, pay for performance, alternative reward systems, government and employer-provided benefit programs. The primary emphasis is on the design of appropriate policies and programs and how these can help support organizational objectives and strategies.

MANA 444 Training and Development (3 credits)

Prerequisite: MANA 362. Topics covered in this course include how training needs are assessed, how effective training programs are designed, how to ensure that learning achieved in training is transferred to the work, and how training programs are evaluated. Emerging issues such as career management and mentoring programs are discussed.

MANA 445 Health and Safety Management (3 credits)

Prerequisite: MANA 362. This course examines the critical aspects of health and safety administration within organizations. It provides a brief overview of the relevant legislation and focuses upon prevention, causes, detection, intervention, reintegration, epidemiological and clinical investigation, and health development. Physical and psychological aspects of health and safety are examined.

MANA 446 Workplace Planning and Staffing (3 credits)

Prerequisite: MANA 362. This course is designed to introduce the conceptual and analytical tools needed to staff organizations effectively with qualified employees. Topics include planning, job analysis, legal issues, recruitment, selection methods, and techniques for developing valid and reliable selection procedures. Both the strategic needs of the organization and the legal environment of contemporary organizations in Quebec and Canada are addressed.

MANA 447 Leadership and Motivation (3 credits)

Prerequisite: COMM 222. This course is designed to familiarize students with current research and theory on motivation and leadership, and their synergy and application in a work context. Implications for the design of reward systems and leader development are addressed. Class activities include student presentations, small group discussions, exercises, cases, and simulations.

MANA 451 Managing a Small Business (3 credits)

Prerequisite: COMM 320 or 410. This course emphasizes the operational aspects of management that are uniquely important to a small enterprise. It provides opportunity to practise operational decision-making under conditions characteristic for small- and medium-sized firms. Themes include strategy and planning, human resource management, marketing, operations and technology, managing the small family business, legal issues and international activities.

MANA 461 Implementing Competitive Strategies (3 credits)

Prerequisite: COMM 401. Bridging the gap between the classroom and the practical day-to-day running of a contemporary business enterprise, this course explores the process by which strategy is linked to managerial action. Corporate strategy states the general direction that the organization will follow. Functional strategy is a formulation of how the business unit intends to compete in its given business sector. The course examines how functional strategies can be key instruments for the realization of business and corporate strategies. *NOTE A/See §200.2*

MANA 463 Strategic Human Resource Management (3 credits)

Prerequisite: MANA 362, and any two of the following: MANA 443, 444, 446. This course is a final-year integrative seminar for Human Resource Management Majors. It focuses on the philosophies underlying current human resource management principles and policies and the processes of their implementation. The course utilizes cases to integrate human resource management areas such as recruitment, selection, training, performance appraisal, compensation, and benefits administration.

MANA 466 (also listed as IBUS 466)

Management of Multinational Corporations (3 credits)

Prerequisite: COMM 222; IBUS 462 or MARK 462. This course introduces the challenges of managing sustainable multinational operations. It addresses themes of globalization and issues in managing global competition and local responsiveness in multiple institutional and cultural environments. The course gives students an appreciation of international competitive and collaborative strategies and the corresponding coordination and control mechanism of multinational corporations. It also highlights the issues of global governance and social responsibility as well as the differences and similarities of management techniques across national borders. Finally, the course examines the future of multinational corporations in the context of global financial, social, and environmental crises.

NOTE: Students who have received credit for IBUS 466 may not take this course for credit.

MANA 478 Entrepreneurial Company Law (3 credits)

Prerequisite: COMM 315. Since many business enterprises are operated as corporations, it is important to familiarize students with the legal aspects involved in creating and managing a corporation. This course is aimed at both students who wish to set up new business enterprises and at those who wish to manage existing businesses effectively. Students study the legal process through which a corporation is set up, and examine strategically important issues relating to the control and voting of shares, unanimous shareholders' agreements, the duties and liabilities of shareholders, directors, and officers, the sale of shares and the protections provided by law to minority shareholders. The Canada Business Corporations Act (C.B.C.A.) along with other related laws, actual court cases and sample legal documents are studied.

MANA 479 *Employment Law* (3 credits)

Prerequisite: COMM 315. This course familiarizes students with important legal issues associated with labour management through the study of the laws and relevant court cases dealing with the rights and obligations of employers and employees, labour standards, certification of unions, strikes, lock-outs, grievances, and arbitration. This course focuses primarily on the labour laws of Quebec, while examining Canadian labour issues.

MANA 480 *Entrepreneurial Family Business* (3 credits)

Prerequisite: COMM 320. Family businesses are the predominant form of business in the world. Almost 80 per cent of new ventures are born as family firms and over 65 per cent of all Canadian firms are family firms. In these firms, family members significantly influence the business including its creation, continuity, mode and extent of growth, and exit. This course prepares students to work effectively and professionally in and with family firms to launch and create cross-generational wealth in family firms.

NOTE: Students who have received credit for this topic under a MANA 499 number may not take this course for credit.

MANA 481 *Introduction to Management Consulting* (3 credits)

Prerequisite: COMM 401. This course focuses on the management consulting profession and process. It offers an examination of the different phases of the consulting process and a reflection on the role of internal consultants and the choice of management consulting as a career. It focuses on the understanding and development of core consulting skills which are essential for any type of consulting engagement, whether one works as an external or internal consultant, and whether the client is a large, medium, or entrepreneurial company, public or non-profit sector organization. A major component of the course is a real-world consulting project that students conduct with a client firm.

NOTE: Students who have received credit for this topic under a MANA 499 number may not take this course for credit.

MANA 482 *Financing of Entrepreneurial Ventures* (3 credits)

Prerequisite: COMM 320. The course objectives are to understand the nature of the financing problem at various stages of business growth; to analyze the advantages and disadvantages of different sources of funding, including internal sources, informal sources, commercial banks, government, business angels, venture capital, and going public; and to appreciate the key elements that go into the structuring of the deal between entrepreneurs and finance providers.

MANA 493 *(also listed as IBUS 493)****International Business Law* (3 credits)**

Prerequisite: COMM 315; MANA 466 or IBUS 466. This course familiarizes business students with the principles of international private and public law that they may encounter in today's fast-paced world of multinational corporations and global business transactions. Topics include international trade organizations and treaties; principles relating to international sales contract performance and dispute resolution alternatives; international payment using bills of exchange and letters of credit; labour in a global economy including child labour and human trafficking issues; international environmental law, waste disposal and pollution issues; as well as the protection of intellectual property rights.

NOTE: Students who have received credit for IBUS 493 may not take this course for credit.

MANA 498 *Special Topics in Human Resource Management* (3 credits)

Prerequisite: MANA 362, and any two of the following: MANA 443, 444, 446. This course is intended to complement and supplement human resource management (HRM) courses taken previously or concurrently. It offers flexibility in content that enables an emphasis on contemporary HRM literature and issues.

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MANA 499 *Special Topics in Management* (3 credits)

Prerequisite: Written permission of the Department. Intended to complement and supplement business courses taken previously or concurrently, this course emphasizes business literature and modern thought. Students are encouraged to work independently on research topics of interest to them. Students repeating MANA 499 register for credits under MANA 498. *NOTE A/See §200.2*

NOTE: Specific topics for this course and prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

61.100

MARKETING

Faculty

Professor and Chair of the Department
CHRISTOPHER A. ROSS, PhD W.Ont.

Distinguished Professor Emeritus
V.H. (MANEK) KIRPILANI, PhD Montr.

Professor Emeritus
B. ZEKI GIDENGIL, PhD Brad.

Professors
BRYAN BARBIERI, MBA Col.
ULRIKE de BRENTANI, PhD McG.
MICHEL LAROCHE, PhD Col., Provost's Distinction
MICHELE PAULIN, PhD U.Q.A.M.
LEA PREVEL KATSANIS, PhD George Washington
GAD SAAD, PhD C'nell.

Associate Professors
ONUR H. BODUR, PhD Virginia State
B. KEMAL BÜYÜKKURT, PhD Indiana
BIANCA GROHMANN, PhD Wash.State
JORDAN LE BEL, PhD McG.
JOOSEOP LIM, PhD Calif. (Irvine)
MRUGANK V. THAKOR, PhD Indiana State

Assistant Professors
ZEYNEP ARSEL, PhD Wis. (Madison)
OHJIN KWON, PhD S. Calif.
TIESHAN LI, PhD Br.Col.
DARLENE WALSH, PhD Tor.

Senior Lecturer
HAROLD SIMPKINS, MBA C'dia.

Lecturers
JOHN AYLEN, MA C'dia.
MARY ANN CIPRIANO, MBA McG.
ELANA COOPERBERG, MBA C'dia.
SHURNA HENRY, MBA Moorehead
ASMAA HILALI, MBA Citadel
ERIC MARTINEAU, MSc C'dia.
RALPH NOBLE, MBA McG.
BRENT PEARCE, MBA McG.
JOYCE SARKIS, MSc C'dia.
HERMAN TUMURCUOGLU, MMS Car.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
MB Building, Room: 013-207
514-848-2424, ext. 2952

Department Objectives

The Marketing Department seeks to cultivate in each student the skills and perspectives essential for effective and responsible marketing. Emphasis is on creating marketing strategies and plans based on a thorough understanding of consumer and industrial buying behaviour.

The Department is committed to fostering a dynamic entrepreneurial orientation together with an appreciation of the essence, importance, and potential power of marketing.

Programs

- 24 Major in Marketing**
 - 12 MARK 301, 302, 305, 495
 - 12 additional MARK credits
 - 12 Minor in Marketing**
 - 6 MARK 302, 305
 - 6 additional MARK credits
-

Marketing Co-operative Program

Director

HAROLD J. SIMPKINS, *Senior Lecturer*

514-848-2424, ext. 2955

The Marketing co-operative program is offered to students who are enrolled in the BComm program and are majoring in Marketing.

The academic content of the co-op program is identical to that of the regular program, but three work terms are interspersed with six study terms.

Students are supervised individually and must meet the requirements specified by both the John Molson School of Business and the Institute for Co-operative Education in order to continue their studies in the co-op format.

Liaison between the student, the employers, and the Institute for Co-operative Education is provided by the Marketing co-op academic director and the co-op committee.

Please refer to §24 of this Calendar for a full description of the co-operative format of the program.

Courses

The Department strongly recommends that students take MARK 302 and 305 before enrolling in Marketing courses at the 400 level.

MARK 201 Introduction to Marketing (3 credits)

This course introduces non-Commerce students to the managerial concepts and practices of marketing. The process of developing a marketing strategy is examined along with the factors and interrelationships related thereto. Readings and cases are used to help students apply these concepts in a variety of business settings.

NOTE: This course is available to non-Commerce program students only. Any such student intending to register in the Marketing Elective Group for Non-Commerce Students or intending to take specific upper-level Marketing courses must take this course as a prerequisite.

MARK 301 Marketing Management II (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course focuses on the management of marketing in organizations. Target market selection and each component of the organization's offer bundle are scrutinized. The course is application-oriented. Additionally, cases are used in order to reinforce learning and to help each student cultivate excellent problem-solving and decision-making skills. Other areas in which marketing can be applied are introduced.

MARK 302 Marketing Research (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. The role of research in the marketing process, the role of models, and the development of measurement techniques are discussed. Emphasis is placed on the nature and scope of marketing research methods for obtaining internal and external data, and on the steps and principles involved in gathering and analyzing data. The student is also briefly introduced to applications of marketing research and to the technique involved in conducting a marketing study. *NOTE A/See §200.2*

NOTE: Students who have received credit for MARK 402 may not take this course for credit.

MARK 305 Consumer Behaviour (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course analyzes the motivations, roles, and behaviour of the consumers, how they are affected by economic, social, and cultural influences, and how the marketer may model this behaviour for

decision-making purposes. *NOTE A/See §200.2*

NOTE: Although not required, it is strongly recommended that MARK 302 be taken prior to or concurrently with this course.

NOTE: Students who have received credit for MARK 405 may not take this course for credit.

MARK 451 *Marketing of Services* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course explores the challenges of providing outstanding customer service and becoming a recognized *service leader* in any given industry. Through lectures, discussions, situation analyses, field studies, and reports, students come to: 1) understand the strategic importance of services, 2) develop a service management mindset, 3) master the key elements of services marketing, 4) learn to manage the service delivery processes, 5) appreciate the significance of a *customer-focus* in service delivery, 6) recognize the challenges of sustainable *moments of truth*, and 7) adopt *customer-centric* managerial approaches to achieve better business performance through service excellence.

NOTE: Students who have received credit for this topic under a MARK 491 number may not take this course for credit.

MARK 452 *e-Marketing* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course offers an introduction to e-marketing strategies and tools that are required for effective marketing via electronic media. In particular, this course focuses on conceptualization regarding new media and practical tools, both of which will contribute to students' ability to analyze new marketing opportunities arising from new electronic media and to develop an appropriate course of action to leverage their strengths. Topics include online advertising, e-commerce, mobile marketing, social media, search engine optimization, web analytics, and eCRM.

NOTE: Students who have received credit for this topic under a MARK 491 number may not take this course for credit.

MARK 453 *Marketing Communications* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course introduces students to the field of marketing communications. The initial part of the course examines the role that communications play in marketing strategy. Then, the specific elements involved in developing and executing an effective promotional campaign such as message strategy, creative execution, media planning and budgeting are examined. Next, the course covers ways to support the promotional campaign through various communication tools, such as sales promotion, Internet marketing, personal selling, publicity and direct marketing. The course ends with a discussion of some of the key legal, ethical and social aspects of marketing communications. *NOTE A/See §200.2*

MARK 454 *Personal Selling* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course has a dual focus: the cultivation of personal selling skills, and the theoretical and applied aspects of managing the personal selling function. Cases, readings, simulations, and presentations are deployed to achieve the course goals.

NOTE A/See §200.2

MARK 457 *Marketing Channels* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course focuses on the different ways in which organizations make their goods and services available for consumption: the inter-organizational system that makes up channels of distribution. Topics covered include why marketing channels exist, the specific nature of channel decisions, design of channel systems, management of relationships among channel members, wholesaling and direct distribution. The role that the revolution in electronic commerce plays in channels is also examined.

MARK 460 *Integrated Marketing Communications Practicum* (3 credits)

Prerequisite: MARK 452, 453. This practicum course builds on and supplements the concepts that were covered in MARK 453. It focuses on the application and integration of all the tools of marketing communications such as advertising, sales promotion, public relations and publicity, personal selling, direct marketing, and Internet marketing. The course also takes into account all contact points and stakeholder groups, including consumers, employees and suppliers, governments, distribution channel members, local communities, opinion leaders and the media. An integral component of the course is the development of a complete integrated marketing communications plan for presentation to a "real life" client using concepts that are discussed in class.

**MARK 462 *(also listed as IBUS 462)*
Environment of World Business (3 credits)**

Prerequisite: COMM 210, 215, 223 or 224. This is a foundation course in international business; the objective is to present information which exposes the student to cultural, social, political, economic, legal, and financial environments in which Canadian business executives manage their operations abroad. All students are encouraged to develop their own philosophy towards international business activities by developing research and analytical skills in analyzing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada.

NOTE: Students who have received credit for IBUS 462 may not take this course for credit.

MARK 463 *Retailing* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course seeks to apply the theories of marketing and administration to the retail situation. Topics covered include site selection for single and multi-unit retail outlets, organizing and staffing the retail operation, the wholesaler-retailer relationship, consumer behaviour in the retail situation. The impact of such new developments as consumer co-operatives, franchising, discounting, and computer technology on the future of retailing is also considered.

NOTE A/See §200.2

MARK 465 (also listed as IBUS 465)***International Marketing Management* (3 credits)**

Prerequisite: MARK 462 or IBUS 462. This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programs. Students will execute a project directed to a selected part of the world.

NOTE: Students who have received credit for IBUS 465 may not take this course for credit.

MARK 485 *Business-to-Business Marketing* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. The course focuses on the managerial aspects of industrial marketing. The concept of organization buying behaviour and its impact on marketing strategy formulation are discussed. Management of the industrial marketing mix considering product service development, intelligence, promotion, channels, and performance measurement is covered, both in existing product lines and new product-launch activities.

MARK 486 *Product Strategy and Innovation* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. The focus of this course is the development of a dynamic and successful product strategy for the organization. Topics covered include product life cycle concepts, the adoption and diffusion of innovations, strategic product planning, developing the service offering, and the process of innovating and launching new products and services.

MARK 491 *Special Topics Seminar* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course focuses on issues of current and potential concern to marketers.

The content may vary from year to year. *NOTE A/See §200.2*

NOTE: Specific topics for this course and additional prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MARK 492 (also listed as IBUS 492)***Cross-Cultural Communications and Management* (3 credits)**

Prerequisite: MARK 462 or IBUS 462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.

NOTE: Students who have received credit for IBUS 492 may not take this course for credit.

MARK 493 *Current Issues in Marketing* (3 credits)

Prerequisite: COMM 223 or 224 or MARK 201. This course focuses on issues of current and potential concern to marketers.

The content may vary from year to year.

NOTE: Specific topics for this course and additional prerequisites relevant in each case will be stated in the Undergraduate Class Schedule.

MARK 495 *Strategic Marketing Planning* (3 credits)

Prerequisite: 60 credits including MARK 301, 302, 305 and six other Marketing credits at the 400 level. This is a holistic, integrative, capstone course directed primarily at cultivating the skills and techniques required for effective marketing planning. Various pedagogical tools including cases, readings, and a major project are deployed to achieve the course goals. Students will develop an actual marketing plan for a product, service, or idea using the concepts and techniques studied throughout their major program.

61.120

ADMINISTRATION

Courses

ADMI 201 *Introduction to Administration (Administered by the Finance Department)* (3 credits)

This course is intended to develop a basic understanding of the role of administration in our society. The course includes a survey of different forms of organizations, their social and legal responsibilities, and how they function to achieve their goals.

NOTE: JMSB students may not take this course for credit.

NOTE: This course does not count towards the requirements for the Minor in Business Studies.

ADMI 202 *Perspective on Canadian Business (Administered by the Finance Department)* (3 credits)

This course is designed to review the historical development of business in Canada and to examine the relationships between the firm (management) and the owners, the employees, the customers, the government, and the community. Further, it studies some of the problems facing Canadian business today: the dehumanizing aspect, pollution problems, large vs. small firms, foreign ownership, and competition.

NOTE: JMSB students may not take this course for credit.

NOTE: Students who have received credit for this course may not take MANA 369 for credit.

NOTE: This course does not count towards the requirements for the Minor in Business Studies.

Courses Offered to Non-Business Students

Students enrolled in programs outside the John Molson School of Business may register for a maximum of six credits per term, up to a maximum of 30 credits offered by the School of Business.

Students not registered in the John Molson School of Business, who wish to register in any courses offered by the School, but do not have the stated prerequisites, must obtain permission in writing from the Student Request Committee of the John Molson School of Business *prior to registration*. The Office of the Associate Dean reserves the right to deregister those students who do not adhere to academic regulations.

CERTIFICATE IN BUSINESS STUDIES

This program is not open to students registered in a program leading to an undergraduate degree. Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

- a) Diploma of Collegial Studies or the equivalent; MATH 208, 209; ECON 201, 203; DESC 200
or
- b) Mature students: MATH 208, 209; ECON 201, 203; DESC 200.

Program**30 Certificate in Business Studies**

24 COMM 210, 212, 215, 217, 220, 222, 223 or 224, 225

6 additional credits from the John Molson School of Business chosen in consultation with an academic advisor.

MINOR IN BUSINESS STUDIES

This program is not open to students registered in a program leading to an undergraduate degree in the John Molson School of Business.

NOTE: A GPA of 2.50 is required for entrance into this minor.

Admission Requirements

MATH 208, 209; ECON 201, 203; DESC 200.

Program**30 Minor in Business Studies**

24 COMM 210, 212, 215, 217, 220, 222, 223 or 224, 225

6 additional credits from the John Molson School of Business chosen in consultation with an academic advisor.

Program**MANAGEMENT ELECTIVE GROUP FOR NON-BUSINESS STUDENTS**

This 15-credit elective group is available to students registered in undergraduate programs outside of the John Molson School of Business. Students choosing this elective group have the opportunity to add a business-oriented management component to their arts, science, engineering, or fine arts degrees.

15 Management Elective Group for Non-Business Students

6 MANA 201, 202

9 Additional credits from MANA 298, 299, 300, 343, 362

NOTE: Since non-business students can only register for a maximum of 30 credits within the John Molson School of Business, students registered in the Minor in Business Studies or the BCompSc Information Systems Option cannot register for the Management elective group.

Program

MARKETING ELECTIVE GROUP FOR NON-BUSINESS STUDENTS

This 15-credit elective group is available to students registered in undergraduate programs outside the John Molson School of Business. Students choosing this elective group have the opportunity to add a business-oriented marketing component to their arts, science, engineering, or fine arts degrees.

15 Marketing Elective Group for Non-Business Students

9 MARK 201, 302, 305

6 Additional credits from MARK 451, 452, 453, 454, 460, 463, 485, 486

NOTE: Since non-business students can only register for a maximum of 30 credits within the John Molson School of Business, students registered in the Minor in Business Studies or the BCompSc Information Systems Option cannot register for the Marketing elective group.

Program

THE BASICS OF BUSINESS ELECTIVE GROUP

This interdisciplinary elective group is designed for non-business students seeking insight into the exciting world of business.

15 The Basics of Business Elective Group

15 Chosen from ACCO 230, 240; ADMI 201, 202; COMM 215; FINA 200; MANA 201, 202, 298; MARK 201

NOTE: This elective group is not open to BComm/BAdmin students. Not all elective-group credits are transferable to the BComm/BAdmin program.

NOTE: Students who have received credit for MANA 266, 213, or 211 may not take MANA 201, 202, or 298 for credit, respectively.

NOTE: Since non-business students can only register for a maximum of 30 credits within the John Molson School of Business, students registered in the Minor in Business Studies or the BCompSc Information Systems Option cannot register for the Basics of Business elective group.

61.150 COMPUTER SCIENCE

For a Major in Business Technology Management see §61.50

61.160 SPECIAL CERTIFICATE PROGRAMS

There are many organizations within the business community designed to serve the needs of people working in specialized areas of business. These organizations recognize that the educational qualifications of those seeking membership must be continually upgraded. Therefore, they sponsor an academic certificate which may be obtained through correspondence courses, or through a lecture program.

The John Molson School of Business co-operates with these business organizations by permitting personnel to register as Visiting students, and to take courses leading to a certificate to be awarded by the organization concerned.

Students must comply with the University regulations regarding dates of application and Visiting Business student entrance requirements as outlined in the Academic Calendar §11. In addition, they must meet the requirements of the specific organization. The credit courses taken may be applied towards the BComm degree, provided the student meets the admission requirements and wishes to transfer from Visiting Business status to undergraduate status after completing a certificate program. Students are advised that they must meet the BComm curriculum requirements in force at the date of transfer.

Each certificate program has one or more special courses required to complete the program. These courses do not carry credit towards an undergraduate degree and are designated as non-credit courses.

Students interested in the following certificate programs may obtain details of required courses from the organization concerned:

- The American Marketing Association (Montreal Chapter)
- Institute of Canadian Bankers
- The Insurance Institute of Canada
- The Trust Companies Institute of Canada
- Professional Secretaries International (CPS)
- Canadian Institute of Management

61.170 SPECIAL PROGRAMS IN ACCOUNTANCY

CERTIFICATE IN ACCOUNTANCY

This program is not open to students registered in a program leading to an undergraduate degree. Students may transfer into the certificate program up to 12 credits earned in an incomplete degree or certificate program or as an Independent student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the program.

Admission Requirements

- a) DEC or the equivalent
 - b) MATH 208, 209; ECON 201, 203; DESC 200; COMM 217, 305
-

Program

30 Certificate in Accountancy

18 ACCO 310, 320, 330, 340, 420, 450

12 additional credits from the John Molson School of Business that are needed to satisfy the requirements of either the CA, CGA, or CMA designations.

The three professional accounting organizations listed below recognize certain Concordia University courses for course exemptions or standing in their professional designation programs.

L'ORDRE DES COMPTABLES AGRÉÉS DU QUÉBEC: Chartered Accountant (CA)

The John Molson School of Business offers a Diploma in Chartered Accountancy which has been accredited by the Order of Chartered Accountants of Quebec. Entry into the program normally requires an undergraduate degree in Commerce, and a Major in Accountancy with high academic standing. Applicants lacking an appropriate pattern of undergraduate work will be required to successfully complete certain qualifying courses, as assigned by the director of the program and the Order of Chartered Accountants of Quebec. For further details, refer to the Graduate Calendar of Concordia's School of Graduate Studies.

L'ORDRE DES COMPTABLES EN MANAGEMENT ACCRÉDITÉS DU QUÉBEC: Certified Management Accountant (CMA)

Students who wish to follow the CMA program must register with L'Ordre des comptables en management accrédités du Québec, 715 Square Victoria 3rd Floor, Montreal, Quebec, H2Y 2H7, 514-849-1155 / 800-263-5390. The list of courses comprising the CMA program is shown below:

ECON 201 or Cegep equivalent*	Introduction to Microeconomics
ECON 203 or Cegep equivalent*	Introduction to Macroeconomics
COMM 210	Contemporary Business Thinking
COMM 212	Business Communication
COMM 215	Business Statistics
COMM 217	Financial Accounting
COMM 220	Analysis of Markets
COMM 222	Organizational Behaviour and Theory
COMM 223 or 224	Marketing Management
COMM 225	Production and Operations Management
COMM 226	Business Technology Management
COMM 305	Managerial Accounting
COMM 308	Introduction to Finance
COMM 315	Business Law and Ethics
COMM 320	Entrepreneurship
COMM 401	Strategy and Competition
ACCO 310	Financial Reporting I
ACCO 320	Financial Reporting II
ACCO 330	Cost and Management Accounting
ACCO 340	Income Taxation in Canada
ACCO 350	Accounting and Information Technology
ACCO 400	Accounting Theory
ACCO 410	Governmental and Not-for-Profit Accounting
ACCO 420	Financial Reporting III
ACCO 430	Advanced Management Accounting
ACCO 435	Integrative Management Accounting Cases
ACCO 450	Assurance Services
IBUS 462 or MARK 462	Environment of World Business

*Students who have not taken the equivalent of ECON 201 and 203 at the Cegep level must take these two courses as restricted electives.

NOTES:

1. This equivalence table is subject to amendment by the Ordre.
2. Students taking University courses must satisfy the necessary prerequisite courses.
3. Concordia students graduating after September 2008, having an overall GPA of at least 3.2 on 4.3, will be exempt from writing the CMA Entrance Exam which is held in June of each year. Students should consult with the Ordre to confirm their

eligibility for this exemption. In all other cases, the CMA Entrance Exam is mandatory. Students are encouraged to attend a coaching seminar prior to taking the CMA Entrance Exam. Students may not sit for the Entrance Exam until all of the above courses or their equivalents have been successfully completed and they are registered as student members of the Ordre.

4. It is necessary to sit the CMA Entrance Exam (or receive exemption from it) in order to take part in Phase 1 of the Strategic Leadership Program. The program consists of work experience, independent study, group and residential sessions. After successful completion of Phase 1 of the Strategic Leadership Program, students must write and pass the CMA Case Exam prior to entering Phase 2 of the Strategic Leadership Program.

L'ORDRE DES CGA DU QUÉBEC: Certified General Accountant (CGA)

Students who wish to follow the CGA program must register with L'Ordre des CGA du Québec located at 500 Place d'Armes, Suite 1800, Montreal, Quebec, H2Y 2W2, 514-861-1823, website: cga-quebec.org.

The list of courses comprising the CGA Academic Program is shown below:

ECON 201 or Cegep equivalent*	Introduction to Microeconomics
ECON 203 or Cegep equivalent*	Introduction to Macroeconomics
COMM 215	Business Statistics
COMM 217	Financial Accounting
COMM 220 (3) (6)	Analysis of Markets
COMM 226	Business Technology Management
COMM 305	Managerial Accounting
COMM 308 (3) (6)	Introduction to Finance
COMM 315	Business Law and Ethics
COMM 401	Strategy and Competition
ACCO 310	Financial Reporting I
ACCO 320	Financial Reporting II
ACCO 330	Cost and Management Accounting
ACCO 340 (4) (6)	Income Taxation in Canada
ACCO 350	Accounting and Information Technology
ACCO 400 (1) (6)	Accounting Theory
ACCO 410 (1) (6)	Governmental and Not-for-Profit Accounting
ACCO 420 (1) (6)	Financial Reporting III
ACCO 440 (4) (6)	Advanced Taxation
ACCO 450 (2) (5) (6)	Assurance Services
ACCO 465 (2)	Advanced Assurance Services
ACCO 490 (4)	Seminar in Taxation

*Students who have not taken the equivalent of ECON 201 and 203 at the Cegep level must take these two courses as restricted electives.

(1) Prerequisite to the Financial Accounting (FA4) examination

(2) Prerequisite to the Auditing 2 (AU2) examination

(3) Prerequisite to the Finance 2 (FN2) examination and professional certification program in Financial Performance

(4) Prerequisite to the Taxation 2 (TX2) examination

(5) Prerequisite to the Management Auditing 1 (MU1) examination

(6) Prerequisite to Professional Applications (PA-1) examination

NOTE: The listing above is subject to amendment. Please communicate with the CGA – Québec Ordre.

Faculty of Engineering and Computer Science

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Section 71

*Dean*ROBIN A.L. DREW, PhD *N'cle.(U.K.)*, ing.*Associate Dean, Academic Affairs*CHRISTOPHER W. TRUEMAN, PhD *McG.*, ing.*Associate Dean, Research and Graduate Studies*CATHERINE N. MULLIGAN, PhD *McG.*, ing.*Associate Dean, Student Academic Services*RADU G. ZMEUREANU, PhD *C'dia.*, ing.*Associate Dean, Academic Programs and Undergraduate Activities*ALI AKGUNDUZ, PhD *Ill.(Chic.)*, PEng*Chair, Department of Electrical and Computer Engineering*WILLIAM E. LYNCH, PhD *Prin.*, ing.*Chair, Department of Mechanical and Industrial Engineering*MARTIN D. PUGH, PhD *Leeds*, PEng, *Provost's Distinction**Chair, Department of Building, Civil and Environmental Engineering*MOHAMMED ZAHEERUDDIN, PhD *Alta.*, PEng*Chair, Department of Computer Science and Software Engineering*PETER GROGONO, PhD *C'dia.*, PEng*Director, Concordia Institute for Information Systems Engineering*MOURAD DEBBABI, PhD *Paris**Chair, Centre for Engineering in Society*DEBORAH DYSART-GALE, PhD *Pitt.*, RN

Location*Sir George Williams Campus*

Engineering, Computer Science and Visual Arts Complex, Room: EV 002.139; 514-848-2424, ext. 3109

Student Academic Services, Room: EV 002.125; 514-848-2424, ext. 3055

Mission Statement

The Faculty of Engineering and Computer Science is dedicated to providing high-quality and comprehensive undergraduate and graduate curricula, to promoting high-calibre research, and to the development of the profession of engineering and computer science in an ethical and socially responsible manner. We strive to prepare graduates to solve real world problems with excellent professional skills leading to superior career opportunities.

71.10 FACULTY OF ENGINEERING AND COMPUTER SCIENCE**71.10.1 Programs Offered**

The following programs are offered in the Faculty of Engineering and Computer Science:

1. BEng degrees in Building, Civil, Computer, Electrical, Industrial, Mechanical, and Software Engineering.
2. BCompSc degree.
3. Minor in Computer Science.

The requirements for the programs are different, and the appropriate section in the following pages must be consulted for each.

71.10.2 Admission Requirements

General admission requirements are listed in §13

In addition, the following specific requirements exist for the various programs. Applicants should specify their choice of program on their application.

Students entering the Faculty of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

APPLICANTS FROM QUEBEC INSTITUTIONS

Successful completion of a two-year pre-university Cegep program is required, including the specific courses in the appropriate profile, as follows:

1. **BEng (all programs)**
BCompSc (Computer Systems Option)

Cegep Profile

Mathematics 201 —

103 or NYA, 105 or NYC, 203 or NYB

Physics 203 —

101 or NYA, 201 or NYB

Chemistry 202 —

101 or NYA

2. **BCompSc (Computer Applications, Computation Arts, Computer Games, Information Systems, Mathematics and Statistics, Software Systems, and Web Services and Applications Options; and Minor in Computer Science)**

Cegep Profile 10.12

Mathematics 201 —

103 or NYA, 105 or NYC, 203 or NYB

Applications from graduates of Cegep technology programs will also be considered. Program requirements for successful applicants will be determined on an individual basis.

APPLICANTS FROM OUTSIDE QUEBEC

Academic qualifications presented by students applying from institutions outside Quebec should be comparable to those expected of students applying from within Quebec.

Where the pre-university education is shorter than in Quebec, students may be considered for admission to the first year of the Extended Credit Program. (See §13.3.2 to 13.3.6, §71.20.2, and 71.70.3)

MATURE ENTRY

Admission requirements are listed in §14.

71.10.3 Academic Regulations

Students should refer to the Academic Regulations of the University in §16.

Definitions

Assessable courses: *all record entries of courses* listed in this Concordia Calendar for which a grade point value is specified in §16.3.3. However, any course which is a requirement for admission to a program offered by the Faculty of Engineering and Computer Science will not be counted unless specifically listed on the student's admission letter.

Dean's Office: appropriate member of the Dean's Office, normally the Associate Dean, Student Academic Services.

Program of Study: course requirements in effect at the time of the latest admission or readmission to a program, for example, BEng (Civil) or BCompSc (Information Systems), including modifications on an individual basis as specified or approved in writing by the Dean's Office, or the Student Request Committee of Faculty Council.

Grade Points: as defined in §16.3.3 of this Calendar.

Weighted Grade Point Average (WGPA): as defined in §16.3.11 of this Calendar.

Academic Year: a period which begins with a summer session followed by a regular session (fall and winter).

Objectives

The objectives of these regulations are:

- a) to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession, and
- b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively and plan programs of study designed to meet their individual needs.

Grading System

See §16.3.3 for the Concordia grading system.

NOTE: Although a "C-" grade is designated as satisfactory, a weighted grade point average of at least 2.00 for the assessment period is required for acceptable standing in the Faculty of Engineering and Computer Science.

Regulations

1. Students' standings are assessed at the end of each academic year providing they have registered for at least 12 credits subsequent to their previous assessment, or in the case of a first assessment, subsequent to their admission to a program of study.
Standings of students who have attempted less than 12 credits since their last assessment are assessed as follows:
 - a) The standings of potential graduates are determined on the basis that these credits constitute an extension of the last assessment period.
 - b) The standings of other students are determined at the end of the academic year in which they have attempted a total of at least 12 credits since their last assessment.
2. Students' standings are determined according to the following criteria.

Acceptable Standing:

A W GPA of at least 2.00 for the assessment period.

Students in acceptable standing may proceed subject to the following conditions: any failing grade must be cleared by repeating and passing the failed course; or in the case of an elective, by replacing the failed course by an alternative within the same group of electives and passing this course. Any variation must be approved by the Dean's Office.

Conditional Standing:

A W GPA of at least 1.50 but less than 2.00 for the assessment period.

Students in conditional standing may proceed subject to the following conditions.

- a) They must successfully repeat all courses in which failing grades were obtained, or replace them by alternatives approved by the appropriate member of the Dean's Office in consultation with the student's department.
- b) They must repeat or replace by approved alternatives at least one-half of those courses in which they obtained grades in the "D" range. The specific courses to be repeated will be determined by the Dean's Office in consultation with the student's department.
- c) Courses to be taken may be specified by the Dean's Office. In no case will the number exceed five per term for full-time students and two per term for part-time students.
- d) They must obtain acceptable standing at the time of their next assessment.

Failed Standing:

Failure to meet the criteria for acceptable or conditional standing, or remaining in conditional standing over two consecutive assessments.

Failed students may apply for readmission through the Dean's Office – Student Academic Services. If readmitted, they will be placed on academic probation. The Application for Readmission form is available in the Student Academic Services Office or can be obtained from the Student Academic Services website located at: encs.concordia.ca.

Failed students should consider the following deadline when they submit their application. Full consideration will be given to all applications that have been received by the Student Academic Services Office before July 15 of each year. Every attempt will be made to inform students regarding the status of their application by August 1 of each year.

Students who are in failed standing and have been absent from their program for 30 consecutive months should refer to §71.10.4 since a new application for admission is required.

No students will be readmitted in the January or summer sessions.

Readmitted students are subject to the following regulations:

- a) They must successfully repeat all courses in which failing grades were obtained, or replace them by alternative courses approved by the appropriate member of the Dean's Office in consultation with the relevant Department.
- b) They must repeat or replace, by approved alternatives, all of the courses in which they obtained grades in the "D" range for the academic year in which they were assessed as failed, and any previous outstanding repeats. The specific courses to be repeated will be determined by the Dean's Office.
- c) They must successfully complete all courses they are required to repeat prior to further registration in other courses.
- d) They must return to acceptable standing at the time of their next assessment.
- e) Other conditions may be applied as deemed appropriate by the Dean's Office.

Availability of Supplemental Examinations

Supplemental examinations are not offered in the Faculty of Engineering and Computer Science other than in the courses COMP 201 and COMP 218.

71.10.4 Registration Regulations

1. Students in the Faculty of Engineering and Computer Science who have been absent from their program for six consecutive terms or more will be officially withdrawn from their program by the Faculty and must submit a new application for admission through the Office of the Registrar.
2. Except for students registered for the co-operative format, the maximum load in the summer sessions is 14 credits, with no more than eight credits in either of its terms.

Prerequisites

1. Students are responsible for ensuring that they have successfully completed all prerequisites to a course before attempting to register for the course.
 2. Students must complete all 200-level courses required for their program before registering for any 400-level courses.
 3. All 200-level courses within the program which are prerequisites for other courses must be completed with a C- or higher. A 200-level course in which a student has obtained a D+ or lower must be repeated before attempting a course for which it is a prerequisite.
 4. A student who has registered for a course without satisfactorily completing all prerequisites may be withdrawn from the course.
-

71.10.5 Graduation Regulations

Students must satisfy all program requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00. The standings of potential graduates who have attempted less than 12 credits since their last assessment are determined on the basis that these credits constitute an extension of the last assessment period.

Students who fail to meet acceptable standing but meet conditional standing will have the following options:

- a) register for 12 credits and meet the criteria for acceptable standing;
- b) register for fewer than 12 credits. In this case, standing will be determined on the basis that these credits constitute an extension of the last assessment period.

The maximum number of credits obtained as an Independent student which may be transferred into programs offered by the Faculty of Engineering and Computer Science is as follows:

BEng and BCompSc: 30

71.10.6 Availability of Programs

Full-time students in the Engineering program normally follow an eight-term sequence. In general, introductory level courses are offered in both day and evening. Subject to the Registration Regulations in §71.10.4 above, a student may register on a part-time basis. Further information on sequencing may be found in the Undergraduate Program Guide issued by the Dean's Office.

71.10.7 Curriculum Requirements and Course Sequences

All students in Engineering programs are required to meet the Canadian Engineering Accreditation Board (CEAB) standards. Students are required to graduate having met the substantial equivalent of the curriculum in force in the winter term prior to degree conferral. It is the student's responsibility to ensure that their course selection meets the program requirements for their graduation. To accommodate this requirement, students are provided with course equivalencies and course sequences on the Student Academic Services website at encs.concordia.ca/scs.

Engineering students should follow the outlined cohort sequence for their program. Failure to do so may result in scheduling problems, the unavailability of courses, or ultimately an extension in the time period to complete their program.

71.10.8 The Co-operative Format

A limited number of high ranking students entering the first year of the regular program leading to the BCompSc degree and the BEng degree are permitted to undertake their studies in the co-operative format in conjunction with the Institute for Co-operative Education. See §24.

The academic content is identical to that of the regular programs; however, in order to continue their studies in the co-operative format in the Faculty of Engineering and Computer Science, or to graduate from one of its programs as members of the Institute for Co-operative Education, students must satisfy the following conditions:

- (i) maintain an annual grade point average (WGPA)* of at least 2.50 in their program;
- (ii) be assigned a grade of pass or pass with distinction for each of the three work-term courses (CWTE or CWTC). Under certain conditions, a student may be placed on co-op probation status. For details, refer to §24;
- (iii) remain in their designated work-study sequence. Any deviations must have prior approval by the director of the Institute for Co-operative Education in consultation with Student Academic Services. For additional information, please refer to §24.

*The WGPA is calculated over all courses in the program in the manner described in §16.3.11.

Regulations for Work Terms

1. Successful completion of the work terms shown in the Co-op Schedule indicated in §24 is a prerequisite for graduation as a member of the Institute for Co-operative Education.
2. Work-term job descriptions are screened by the co-op coordinator. Only jobs approved by the Institute for Co-operative Education will be accepted as being suitable for the work-term requirements.
3. Work-term jobs are full-time employment normally for a minimum of 12 consecutive weeks (14 to 16 weeks preferably).
4. A work-term report must be submitted each work term on a subject related to the student's employment. This report must be submitted to the Institute for Co-operative Education on or before the deadline shown in §24. Grammar and content of work-term reports are evaluated by the Institute for Co-operative Education and the technical aspects are evaluated by the co-op program director responsible. Evidence of the student's ability to gather material relating to the job, analyze it effectively, and present it in a clear, logical, and concise form is required in the report.

5. The required communication component consists of an oral presentation on a technical subject or engineering task taken from the student's work environment. The presentation will be given on campus in a formal setting after students have returned to their study term. A written summary is also required. Guidelines for the preparation of this oral presentation are provided in the Co-op Student Handbook.
6. Work terms will be evaluated for satisfactory completion. Assessment is based upon the employer evaluation of performance, the work-term report and communication component which together constitute the job performance as related to the whole work term. Students must pass all required components. The grade of pass with distinction, pass, or failure will be assigned to each of the work-term courses. A failing grade will result in the student's withdrawal from the Institute for Co-operative Education.

71.10.9 Concordia Institute for Aerospace Design and Innovation (CIADI)

The Concordia Institute for Aerospace Design and Innovation (CIADI) promotes awareness and provides leading-edge know-how among Engineering students and practising engineers in design and innovation, particularly in the field of aerospace, with emphasis on its multidisciplinary nature. While some members of the Institute may enter their field upon completion of their degree, the initiation into research provided to CIADI members is helpful to students who wish to pursue graduate studies in the field of aerospace.

Membership

Students accepted to the Institute are selected from among the top second- and third-year undergraduate students in the Faculty of Engineering and Computer Science, and work on collaborative design and research projects over several terms of Engineering studies. Students are supervised by Concordia faculty members and receive mentoring from industry representatives working in the field. Eligible projects are credited by the Faculty as capstone design projects.

Registration

Students accepted to the Institute are required to register in two zero-credit courses, IADI 301 and 401, at the beginning of each respective calendar year in order to remain affiliated with the Institute. A pass with distinction, pass, or fail grade is awarded for these courses. Students who receive a pass with distinction grade in the first course IADI 301 may continue in the Institute for a second year. Students who successfully complete both the first- and second-year courses IADI 301 and 401 will be recognized as full members of the Institute and this recognition will appear on their University transcript and diploma. Students who receive a failing grade in their first course IADI 301 will not be allowed to continue with CIADI and shall receive no acknowledgement of this activity on their transcript. Students who receive only a pass grade in their first course IADI 301 will be withdrawn from CIADI, but shall receive an acknowledgement of this course on their transcript.

71.20 BENG

71.20.1 Curriculum for the Degree of BEng

The University offers programs leading to the degree of BEng in the fields of Building, Civil, Computer, Electrical, Industrial, Mechanical, and Software Engineering.

The BEng degrees in Computer, Electrical, Industrial, Mechanical and Software Engineering require completion of a minimum of 120 credits. The BEng degrees in Building and Civil Engineering consist of 119 credits. Program requirements comprise a group of required courses with a group of elective courses which allow students to select part of their program to provide some depth in an area of specialization (their "option") according to their particular interests, or breadth in the general field of their chosen discipline.

Students in Engineering programs may not combine their program with a minor or cluster from another field of study. Any exception to this policy must be approved by the Faculty's Student Request Committee.

In their final undergraduate year, students with high standing may apply for permission through the Dean's Office to register for a limited number of graduate courses offered by the Faculty in lieu of some courses in the undergraduate program.

Successful completion of a BEng program requires hard work and considerable dedication on the part of each student. Courses are presented with the expectation of an average of about two hours of "outside" work for each lecture hour and about one-half hour of "outside" work for each hour spent in the laboratory for all programs of study.

71.20.2 Extended Credit Program

Students admitted to an Extended Credit Program under the provisions of §13.3.2 or 13.8.1 must successfully complete the requirements of a specific program, as set out in §71.30 to 71.50, plus the following courses:

MATH 202³, 203³, 204³, 205³

PHYS 204³, 205³

CHEM 205³

Six credits chosen from courses in the humanities and social sciences. ESL courses and courses that focus on the acquisition of a language may not be used to meet this requirement.

Students in the Extended Credit Program (ECP) or the Mature Entry Program (MEP) (see §14.2.3) or any other students who have been assigned credits in Humanities and Social Sciences must select those credits from the two lists below.

Social Sciences

AHSC 241	Recreation and Leisure in Contemporary Society
ANTH 202	Introduction to Culture
ECON 201	Introduction to Microeconomics
ECON 203	Introduction to Macroeconomics
EDUC 230	Introduction to Philosophy of Education
ENCS 283	Innovation and Critical Thinking in Science and Technology
GEOG 203	Canadian Environmental Issues
GEOG 204	Global Environmental Issues
GEOG 210	Geography of Global Change
GEOG 220	The Human Environment: Place, Space, and Identity
INST 250	Introduction to Library Research Practices
LING 222	Language and Mind: The Chomskyan Program
LING 300	Sociolinguistics
POLI 202	Introduction to Political Science
POLI 213	Contemporary Issues in Global Politics
POLI 390	Ethics and Competing Political Perspectives
RELI 214	Religions of the West
RELI 215	Religions of Asia
RELI 216	Encountering Religions
RELI 218	Wisdom, Traditions, and Enlightenment
RELI 310	Self and Other: Exploring Value Choices in Personal and Interpersonal Relations
RELI 312	Justice and Social Conflict in a Globalized World
RELI 374	Religion and Science
SCPA 201	Introduction to Public Policy and the Public Interest
SCPA 215	Economics for Public Policy and Community Development
SOCI 203	Introduction to Society
WSDB 290	Introduction to Women's Studies I
WSDB 291	Introduction to Women's Studies II

Humanities

ARTH 353	Technology and Contemporary Art
ARTH 354	Studies in Interdisciplinarity in the Visual Arts
CLAS 266	An Introduction to Classical Archaeology
COMS 360	Mass Communication
ENGL 224	The Creative Process
ENGL 233	Critical Reading
FLIT 230	Introduction à la culture francophone
FLIT 240	Introduction à la littérature francophone
FMST 214	English-Canadian Film
FMST 215	Le cinéma québécois
HIST 201	Introduction to European History to 1789
HIST 202	Introduction to European History, from 1789 to the Present
HIST 205	History of Canada, Post-Confederation
HIST 281	Film in History
HIST 283	The 20th Century: A Global History
LBCL 201	Great Books: Western History and Thought from Antiquity through the Renaissance
LBCL 202	Great Books: Western Culture and Expression from Antiquity through the Renaissance
LBCL 203	Great Books: Western History and Thought from the Reformation through Modernity
LBCL 204	Great Books: Western Culture and Expression from the Reformation through Modernity
PHIL 201	Problems of Philosophy
PHIL 210	Critical Thinking
PHIL 232	Introduction to Ethics
PHIL 233	Applied Ethics: Moral Sensitivity and Human Well-Being
PHIL 235	Biomedical Ethics
PHIL 275	From Modern to Postmodern: Philosophical Thought and Cultural Critique
PHIL 330	Contemporary Ethical Theory
THEO 202	Introduction to Biblical Studies
THEO 204	Introduction to Christian Ethics
THEO 233	Religious Pluralism in a Secular Culture

71.20.3 Accreditation by the Canadian Council of Professional Engineers

All Engineering programs in the Faculty have been designed to meet the criteria of the Canadian Engineering Accreditation Board. These programs are assessed at regular intervals according to the rules and procedures of the Board. Graduates of accredited programs are qualified for membership in the Ordre des ingénieurs du Québec, or its equivalent in any other provincial jurisdiction.

71.20.4 Membership in the Ordre des ingénieurs du Québec

The Ordre des ingénieurs du Québec (oiq.qc.ca) currently admits graduates of the BEng curricula in Building, Civil, Computer, Electrical, Industrial, Mechanical, and Software Engineering, as members. Quebec law requires that candidates seeking admission to provincially recognized Quebec professional corporations (such as the Ordre des ingénieurs du Québec) possess an appropriate knowledge of the French language.

A person is deemed to have that knowledge who:

- (1) has taken at least three years of full-time instruction given in French at the secondary or post-secondary level;
- (2) has passed the French mother tongue examinations in the fourth or fifth grade of the secondary level;
- (3) has obtained in Quebec, a secondary-school certificate for the 1985-86 school year or later.

In all other cases, a person must obtain a certificate delivered by the Office québécois de la langue française (oqlf.gouv.qc.ca) or hold a certificate defined as equivalent by regulation of the Government.

71.20.5 Degree Requirements

To be recommended for the degree of BEng, students must satisfactorily complete the courses of the Engineering Core as well as those specified for their particular program in subsequent sections in accordance with the graduation requirements in §71.10.5.

Engineering Core		Credits
ELEC 275	Principles of Electrical Engineering	3.50 (2)
ENCS 282	Technical Writing and Communication	3.00
ENGR 201	Professional Practice and Responsibility	1.50
ENGR 202	Sustainable Development and Environmental Stewardship	1.50 (1)
ENGR 213	Applied Ordinary Differential Equations	3.00
ENGR 233	Applied Advanced Calculus	3.00
ENGR 301	Engineering Management Principles and Economics	3.00
ENGR 371	Probability and Statistics in Engineering	3.00
ENGR 391	Numerical Methods in Engineering	3.00 (3)
ENGR 392	Impact of Technology on Society	3.00 (4)
	General Education elective	3.00 (5)
		<hr/> 30.50

NOTES:

- (1) The Engineering Core credits for students in the Building Engineering program are reduced from 30.5 credits to 29 credits since Building Engineering students are not required to take this course in their program.
- (2) The Engineering Core credits for students in the Mechanical and Industrial Engineering programs are reduced from 30.5 credits to 27 credits since Mechanical and Industrial Engineering students are not required to take this course in their program. Students in Electrical and Computer Engineering shall replace ELEC 275 with ELEC 273.
- (3) Students in Software Engineering may replace ENGR 391 with COMP 361.
- (4) Students in Building Engineering shall replace ENGR 392 with BLDG 482.
- (5) Students must select three General Education elective credits from one of the lists in §71.20.2 and §71.20.6. Students in Industrial Engineering shall take ACCO 220 as their General Education elective.

71.20.6 General Education Elective

All Engineering students must complete three credits of General Education. This course may be chosen from courses in the Social Sciences and Humanities listed in §71.20.2 or the list below.

ADMI 201	Introduction to Administration
ADMI 202	Perspective on Canadian Business
MANA 201	Introduction to Business and Management
MANA 202	Human Behaviour in Organizations
MANA 300	Entrepreneurship: Launching Your Business
MARK 201	Introduction to Marketing
URBS 230	Urban Development

Please note the following:

- 1) Prior to registering, students who do not have any specified prerequisites for a General Education elective course must obtain permission of the relevant Department.

- 2) An ESL course or an introductory course that deals with the acquisition of a language will not be considered as a General Education elective.
 - 3) Should students wish to take a General Education elective course not listed above, they must receive written permission from the Student Academic Services Office of the Faculty of Engineering and Computer Science prior to taking the course.
-

71.20.7 Writing Skills Requirement

The Faculty of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French prior to graduation.

All students admitted to the Faculty of Engineering and Computer Science as of September 2001 must meet the writing skills requirement. To do this, students can write the Engineering Writing Test, or take ENCS 272 and earn a grade of C- or better. Newly admitted students are strongly encouraged to meet the requirement very early in their program (fall term of first year for students starting in September or winter term of first year for students starting in January) in order to avoid the risk of delayed graduation should remedial work prove necessary. The Engineering Writing Test is especially designed to address the writing skills typically demanded of engineers. Students who are required to take ESL courses should meet the writing skills requirements in the term following completion of their ESL courses.

All ESL and English/French language courses taken to satisfy this requirement are in addition to Engineering program requirements.

71.20.8 Industrial Experience and Reflective Learning Courses

Students employed full-time in an engineering position during their non-study terms may have this Industrial Experience recorded on their record, provided they successfully complete the Reflective Learning course associated with this work term.

Industrial Experience work terms will be coded as ENGR 107, 207, and 307, and the associated Reflective Learning courses will be coded as ENGR 108, 208, and 308 respectively.

Students may only register for these courses with the permission of the Faculty.

The Industrial Experience terms ENGR 107, 207, and 307 carry no credit value and are used to indicate that the student is on an Industrial Experience term.

The ENGR 108, 208, and 308 Industrial Experience Reflective Learning courses are worth three credits and are marked on a pass/fail basis. They are above and beyond the credit requirements of the student's program and are not transferable nor are they included in the full- or part-time assessment status.

Students studying for a co-op work term or CIADI term should not register for these Industrial Experience and Reflective Learning courses.

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KE-LIN DU, PhD *Huazhong, China*
AFSHIN HAGHIGHAT, PhD *C'dia.*
JIAREN LIU, PhD *E.China Inst. Tech., Nanjing*
IRAJ MANTEGH, PhD *Tor.*
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MOHSEN AZIZI, PhD *C'dia.*
SHAH JAHINUZZAMAN, PhD *Wat.*
NADER MESKIN, PhD *C'dia.*
IRINA STATEIKINA, PhD *C'dia.*
OLIVIER TOUSIGNANT, PhD *Montr.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 005.139
514-848-2424, ext. 3100

Department Objectives

Electrical Engineering is concerned primarily with energy and information, their conversion and transmission in the most efficient and reliable manner. This vast field of endeavour includes many specialties and electrical engineers may be involved in one or more of these throughout their careers. A partial list includes electronics, integrated circuit design, very large scale integrated (VLSI) circuit design, layout and testing, controls, robotics, system simulation, telecommunications, signal processing, computer hardware design, software design, power devices, power and control systems, electromechanical systems, microelectromechanical devices, electromagnetics, antennas, wave guides, lasers, and optoelectronics.

Computer Engineering is the driving force of the information revolution and its transformation of society. Over the course of their careers, computer engineers will be called upon to meet a number of challenges, most of which cannot be imagined today. A partial list of current specialties includes computer architecture, digital electronics, digital circuits, very large scale integrated (VLSI) circuit design, layout and testing, digital circuit testing and reliability, software design, software engineering, digital communication and computer networks.

The four-year programs consist of the Engineering Core, taken by all Engineering students, program cores and electives. The Electrical Engineering Core provides a solid introduction to all aspects of the discipline, to programming methodology and to the design of large software systems. Technical electives are scheduled to enable students to register for sets of related technical courses. Current sets of electives include: Communications and Signal Processing, Computer Systems, Electronics and VLSI, Power, Control Systems and Avionics, and Waves and Electromagnetics. The Computer Engineering Core provides a thorough

grounding in all aspects of computer hardware and software. Technical electives allow students to acquire further knowledge in various aspects of hardware or software. A mandatory final-year design project gives students in both programs the opportunity to apply the knowledge they have acquired to the design and testing of a working prototype. Six Quebec universities have joined together with Hydro-Québec to create the Institute for Electrical Power Engineering whose primary mission is to meet the anticipated shortfall in this area. Students accepted by the Institute are expected to complete six courses offered by participating universities. Some of these courses are offered in English and others in French. Students register for courses at their home universities.

71.30.1 Course Requirements (BEng in Electrical Engineering)

The program in Electrical Engineering consists of the Engineering Core, the Electrical Engineering Core, and one of five choices as set out below. The normal length of the program is 120 credits.

Engineering Core (30.5 credits)

See §71.20.5.

Electrical Engineering Core		Credits
COEN 212	Digital Systems Design I	3.50
COEN 231	Introduction to Discrete Mathematics	3.00
COEN 243	Programming Methodology I	3.00
COEN 244	Programming Methodology II	3.00
COEN 311	Computer Organization and Software	3.50
ELEC 251	Fundamentals of Applied Electromagnetics	3.00
ELEC 264	Signals and Systems I	3.00
ELEC 311	Electronics I	4.00
ELEC 321	Introduction to Semiconductor Materials and Devices	3.50
ELEC 331	Fundamentals of Electrical Power Engineering	3.50
ELEC 351	Electromagnetic Waves and Guiding Structures	3.00
ELEC 363	Fundamentals of Telecommunications Systems	3.50
ELEC 364	Signals and Systems II	3.50
ELEC 365	Complex Variables and Partial Differential Equations	3.00
ELEC 370	Modelling and Analysis of Physical Systems	3.50
ELEC 372	Fundamentals of Control Systems	3.50
ELEC 390	Electrical Engineering Team Design Project	3.00
ELEC 490	Capstone Electrical Engineering Design Project	4.00
		<hr/> 60.00

Students may choose one of the following options:

- I. Electronics/VLSI Option
- II. Telecommunications Option
- III. Power and Renewable Energy Option
- IV. Avionics and Control Option

Otherwise, students must follow V.

I. Electronics/VLSI Option		Credits
COEN 315	Digital Electronics	3.50
COEN 451	VLSI Circuit Design	4.00
ELEC 312	Electronics II	4.00
Minimum number of Elective credits:		18.00
at least 3.5 of these 18 credits must be taken from the Electronics/VLSI Option Electives list. The rest may be chosen from the Electrical Engineering Electives list.		
		<hr/> 29.50

Electronics/VLSI Option Electives		Credits
COEN 313	Digital Systems Design II	3.50
COEN 413	Hardware Functional Verification	3.00
ELEC 421	Solid State Devices	3.50
ELEC 422	Design of Integrated Circuit Components	3.50
ELEC 423	Introduction to Analog VLSI	4.00
ELEC 424	VLSI Process Technology	3.50

ELEC 425	Optical Devices for High-Speed Communications	3.50
ELEC 433	Power Electronics	3.50
ELEC 441	Modern Analog Filter Design	3.50
ELEC 442	Digital Signal Processing	3.50

II. Telecommunications Option Credits

ELEC 442	Digital Signal Processing	3.50
ELEC 462	Introduction to Digital Communications	3.50
ELEC 463	Telecommunication Networks	3.00
	Minimum number of Elective credits:	19.50
	at least 6 of these 19.5 credits must be taken from the Telecommunications Option Electives list. The rest may be chosen from the Electrical Engineering Electives list.	
		<hr/> 29.50

Telecommunications Option Electives Credits

ELEC 425	Optical Devices for High-Speed Communications	3.50
ELEC 453	Microwave Engineering	3.50
ELEC 456	Antennas	3.50
ELEC 457	Design of Wireless RF Systems	3.00
ELEC 464	Wireless Communications	3.00
ELEC 465	Networks Security and Management	3.50
ELEC 466	Introduction to Optical Communication Systems	3.50
ELEC 472	Advanced Telecommunication Networks	3.50

III. Power and Renewable Energy Option Credits

ELEC 433	Power Electronics	3.50
ELEC 437	Renewable Energy Systems	3.00
ELEC 440	Controlled Electric Drives	3.50
ELEC 481	Linear Systems	3.50
	Minimum number of Elective credits:	16.00
	at least 3 of these 16 credits must be taken from the Power and Renewable Energy Option Electives list. The rest may be chosen from the Electrical Engineering Electives list.	
		<hr/> 29.50

Power and Renewable Energy Option Electives Credits

ELEC 430	Electrical Power Equipment*	3.50
ELEC 431	Electrical Power Systems	3.50
ELEC 432	Control of Electrical Power Conversion Systems*	3.50
ELEC 434	Behaviour of Power Systems*	3.50
ELEC 435	Electromechanical Energy Conversion Systems	3.50
ELEC 436	Protection of Power Systems*	3.50
ELEC 438	Industrial Electrical Systems*	3.50
ELEC 439	Hybrid Electric Vehicle Power System Design and Control	3.00
ELEC 442	Digital Signal Processing	3.50
ELEC 482	System Optimization	3.50
ELEC 483	Real-Time Computer Control Systems	3.50

*Note: ELEC 430, 432, 434, 436, and 438 are usually offered in the French language.

IV. Avionics and Control Option Credits

ELEC 415	Flight Control Systems	3.50
ELEC 416	Avionic Navigation Systems	3.00
ELEC 483	Real-Time Computer Control Systems	3.50
ENGR 417	Standards, Regulations and Certification	3.00
ENGR 418	Integration of Avionics Systems	3.00
	Minimum number of Elective credits:	13.50
	Electives must be chosen from the Electrical Engineering Electives list.	
		<hr/> 29.50

V. For students NOT selecting an option

A minimum of 29.5 credits must be chosen from the Electrical Engineering Electives list.

Electrical Engineering Electives

Courses are listed in groups to facilitate course selection.

A. Communications and Signal Processing		<i>Credits</i>
ELEC 441	Modern Analog Filter Design	3.50
ELEC 442	Digital Signal Processing	3.50
ELEC 462	Introduction to Digital Communications	3.50
ELEC 463	Telecommunication Networks	3.00
ELEC 464	Wireless Communications	3.00
ELEC 465	Networks Security and Management	3.50
ELEC 466	Introduction to Optical Communication Systems	3.50
ELEC 472	Advanced Telecommunication Networks	3.50
B. Computer Systems		<i>Credits</i>
COEN 313	Digital Systems Design II	3.50
COEN 316	Computer Architecture and Design	3.00
COEN 317	Microprocessor Systems	4.00
COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 346	Operating Systems	4.00
COEN 352	Data Structures and Algorithms	3.00
COEN 421	Embedded Systems and Software Design	4.00
COEN 432	Applied Genetic and Evolutionary Systems	3.00
SOEN 341	Software Process	3.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Architecture and Design I	3.00
C. Electronics/VLSI		<i>Credits</i>
COEN 315	Digital Electronics	3.50
COEN 413	Hardware Functional Verification	3.00
COEN 451	VLSI Circuit Design	4.00
ELEC 312	Electronics II	4.00
ELEC 421	Solid State Devices	3.50
ELEC 422	Design of Integrated Circuit Components	3.50
ELEC 423	Introduction to Analog VLSI	4.00
ELEC 424	VLSI Process Technology	3.50
ELEC 425	Optical Devices for High-Speed Communications	3.50
D. Power		<i>Credits</i>
ELEC 430	Electrical Power Equipment*	3.50
ELEC 431	Electrical Power Systems	3.50
ELEC 432	Control of Electrical Power Conversion Systems*	3.50
ELEC 433	Power Electronics	3.50
ELEC 434	Behaviour of Power Systems*	3.50
ELEC 435	Electromechanical Energy Conversion Systems	3.50
ELEC 436	Protection of Power Systems*	3.50
ELEC 437	Renewable Energy Systems	3.00
ELEC 438	Industrial Electrical Systems*	3.50
ELEC 439	Hybrid Electric Vehicle Power System Design and Control	3.00
ELEC 440	Controlled Electric Drives	3.50

*Note: ELEC 430, 432, 434, 436, and 438 are usually offered in the French language.

E. Control Systems and Avionics		<i>Credits</i>
ELEC 415	Flight Control Systems	3.50
ELEC 416	Avionic Navigation Systems	3.00
ELEC 481	Linear Systems	3.50
ELEC 482	System Optimization	3.50
ELEC 483	Real-Time Computer Control Systems	3.50
ENGR 417	Standards, Regulations, and Certification	3.00

ENGR 418	Integration of Avionics Systems	3.00
ENGR 472	Robot Manipulators	3.50
F. Waves and Electromagnetics		<i>Credits</i>
ELEC 453	Microwave Engineering	3.50
ELEC 455	Acoustics	3.00
ELEC 456	Antennas	3.50
ELEC 457	Design of Wireless RF Systems	3.00
ELEC 458	Techniques in Electromagnetic Compatibility	3.00
G. Other		<i>Credits</i>
ELEC 498	Topics in Electrical Engineering	3.00
ENGR 411	Special Technical Report	1.00

71.30.2 Course Requirements (BEng in Computer Engineering)

The program in Computer Engineering consists of the Engineering Core, the Computer Engineering Core, and one of the two choices as set out below. The normal length of the program is 120 credits.

Engineering Core: (30.5 credits)

See §71.20.5.

Computer Engineering Core		<i>Credits</i>
COEN 212	Digital Systems Design I	3.50
COEN 231	Introduction to Discrete Mathematics	3.00
COEN 243	Programming Methodology I	3.00
COEN 244	Programming Methodology II	3.00
COEN 311	Computer Organization and Software	3.50
COEN 316	Computer Architecture and Design	3.00
COEN 317	Microprocessor Systems	4.00
COEN 346	Operating Systems	4.00
COEN 352	Data Structures and Algorithms	3.00
COEN 390	Computer Engineering Team Design Project	3.00
COEN 490	Capstone Computer Engineering Design Project	4.00
ELEC 264	Signals and Systems I	3.00
ELEC 311	Electronics I	4.00
ELEC 321	Introduction to Semiconductor Materials and Devices	3.50
ELEC 353	Transmission Lines, Waves and Signal Integrity	3.00
ELEC 364	Signals and Systems II	3.50
ELEC 370	Modelling and Analysis of Physical Systems	3.50
ELEC 372	Fundamentals of Control Systems	3.50
SOEN 341	Software Process	3.00
		<hr/> 64.00

Students may choose the Avionics and Embedded Systems option; otherwise, students must follow II.

I. Avionics and Embedded Systems Option Core		<i>Credits</i>
COEN 320	Introduction to Real-Time Systems	3.00
COEN 421	Embedded Systems and Software Design	4.00
ELEC 415	Flight Control Systems	3.50
ELEC 416	Avionic Navigation Systems	3.00
ENGR 418	Integration of Avionics Systems	3.00
	Minimum number of Elective credits	9.00
	must be chosen from the Computer Engineering Electives list	
		<hr/> 25.50

II. For Students NOT Selecting an Option:

A minimum of 25.5 credits must be chosen from the Computer Engineering Electives list. No more than 16 of these credits may be chosen from topic area C – Computer Science and Software Engineering.

Computer Engineering Electives

Courses are listed in groups to facilitate course selection.

A. Hardware/Electronics/VLSI		<i>Credits</i>
COEN 313	Digital Systems Design II	3.50
COEN 315	Digital Electronics	3.50
COEN 413	Hardware Functional Verification	3.00
COEN 451	VLSI Circuit Design	4.00
ELEC 312	Electronics II	4.00
ELEC 423	Introduction to Analog VLSI	4.00
ELEC 458	Techniques in Electromagnetic Compatibility	3.00
B. Real-Time and Software Systems		<i>Credits</i>
COEN 320	Introduction to Real-Time Systems	3.00
COEN 345	Software Testing and Validation	4.00
COEN 421	Embedded Systems and Software Design	4.00
COEN 432	Applied Genetic and Evolutionary Systems	3.00
C. Computer Science and Software Engineering		<i>Credits</i>
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 353	Databases	4.00
COMP 371	Computer Graphics	4.00
COMP 426	Multicore Programming	4.00
COMP 428	Parallel Programming	4.00
COMP 442	Compiler Design	4.00
COMP 451	Database Design	4.00
COMP 465	Design and Analysis of Algorithms	3.00
COMP 472	Artificial Intelligence	4.00
COMP 474	Intelligent Systems	4.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Architecture and Design I	3.00
SOEN 344	Software Architecture and Design II	3.00
SOEN 357	User Interface Design	3.00
SOEN 431	Formal Methods	3.00
SOEN 448	Management of Evolving Systems	3.00
D. Telecommunications, Networks and Signal Processing		<i>Credits</i>
COEN 445	Communication Networks and Protocols	4.00
ELEC 363	Fundamentals of Telecommunications Systems	3.50
ELEC 442	Digital Signal Processing	3.50
ELEC 462	Introduction to Digital Communications	3.50
ELEC 465	Networks Security and Management	3.50
ELEC 472	Advanced Telecommunication Networks	3.50
E. Control Systems		<i>Credits</i>
ELEC 481	Linear Systems	3.50
ELEC 482	System Optimization	3.50
ELEC 483	Real-Time Computer Control Systems	3.50
ENGR 472	Robot Manipulators	3.50
F. Avionics		<i>Credits</i>
ELEC 415	Flight Control Systems	3.50
ELEC 416	Avionic Navigation Systems	3.00
ENGR 417	Standards, Regulations and Certification	3.00
ENGR 418	Integration of Avionics Systems	3.00
G. Other		<i>Credits</i>
COEN 498	Topics in Computer Engineering	3.00
ENGR 411	Special Technical Report	1.00

Faculty*Chair*

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Associate Chair

KUDRET DEMIRLI, PhD *Tor.*, PEng, *Professor*

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 SUI LIN, Dring *Karlsruhe*
 HUGH J. MCQUEEN, PhD *Notre Dame*
 MOHAMED O.M. OSMAN, DrScTech, *Swiss Fed.Inst.Tech.*

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 PAULA WOOD-ADAMS, PhD *McG.*
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ONUR KUZGUNKAYA, PhD *Windsor*

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ALEXANDRE PARADIS, PhD *ETS*

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CHRISTIAN MOREAU, PhD *Laval*

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ALA-EDDIN AL MOUSTAFA, PhD *Paris XIII*
CHANDRA ASTHANA, PhD *I.I.Sc.*
XINJIN CAO, PhD *Birm.*
DOMINIQUE DEROME, PhD *C'dia.*
MAMDOUH GHANNAM, PhD *Sask.*
ELENA KONOPLEVA, PhD *Mariupol Metallurgical Inst.*
CAMILLE-ALAIN RABBATH, PhD *McG.*
YVAN SOUCY, PhD *Car.*
XIAO-WEI TU, PhD *Tech.Compiègne*

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PIERRE MARCOTTE, PhD *Virginia Poly.Inst.&State*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 004.139
514-848-2424, ext. 3125

Department Objectives

The Department of Mechanical and Industrial Engineering offers two distinct undergraduate programs, one leading to the BEng in **Mechanical Engineering**, the other to the BEng in **Industrial Engineering**. Mechanical Engineering is concerned with all forms of power generation (hydro-electric, steam, internal combustion, nuclear, jet rocket, and fuel cells), the design of mechanisms and machines, transportation systems, controls and automation, vibration analysis, environmental control (heating, ventilation, and refrigeration), materials handling, and precision measurement. The Mechanical Engineering curriculum consists of a combination of core courses with a series of technical electives that allow students to obtain some specialization in a particular area of the field depending on their interests and expected future professional activity. Three options are available: Aerospace and Propulsion Engineering; Design and Manufacturing Engineering; and Systems and Mechatronics. Industrial Engineering is concerned with the design, organization, analysis, and integration of people and industrial systems components in order to achieve or enhance effectiveness. These components include whole machines, transportation and conveyance elements, physical plant, organizational frameworks, schedules, and budgets. The Industrial Engineering curriculum is therefore designed to give students the background needed to define and solve problems related to the conception, improvement, integration, and implementation of industrial systems.

71.40.1 Course Requirements (BEng in Mechanical Engineering)

The program in Mechanical Engineering consists of the Engineering Core, the Mechanical Engineering Core, and option requirements as shown below. The minimum length of the program is 120 credits.

Engineering Core (27 credits)
See §71.20.5.

Mechanical Engineering Core		Credits
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00

ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 361	Fluid Mechanics I	3.00
MECH 211	Mechanical Engineering Drawing	3.50
MECH 215	Programming for Mechanical and Industrial Engineers	3.50
MECH 221	Materials Science	3.00
MECH 311	Manufacturing Processes	3.75
MECH 313	Machine Drawing and Design	3.00
MECH 321	Properties and Failure of Materials	3.50
MECH 343	Theory of Machines	3.50
MECH 344	Machine Element Design	3.00
MECH 351	Thermodynamics II	3.50
MECH 352	Heat Transfer I	3.50
MECH 361	Fluid Mechanics II	3.50
MECH 368	Electronics for Mechanical Engineers	3.50
MECH 370	Modelling, Simulation and Control Systems	3.50
MECH 371	Analysis and Design of Control Systems	3.75
MECH 375	Mechanical Vibrations	3.50
MECH 390	Mechanical Engineering Design Project	3.00
		<hr/> 73.25

Option Requirements

Students in the Mechanical Engineering program must complete at least 19.75 elective credits from within one of options A, B, or C. Prior to registration for elective courses, students indicate their choice of option on a form available from the Department, which must be submitted to the Chair's office for approval *prior to March 30*. Students will work in the area of their option within their MECH 490 project.

1. Option A — Aerospace and Propulsion

Students must complete the following compulsory courses from the Option Core and at least 12.75 credits from the Option Electives.

Option A Core		Credits
MECH 464	Aerodynamics	3.00
MECH 490A	Capstone Mechanical Engineering Design Project	4.00
Option A Electives		Credits
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00
ENGR 417	Standards, Regulations and Certification	3.00
ENGR 418	Integration of Avionics Systems	3.00
MECH 431	Principles of Aeroelasticity	3.00
MECH 452	Heat Transfer II	3.50
MECH 453	Heating, Ventilation and Air Conditioning Systems	3.00
MECH 460	Finite Element Analysis	3.75
MECH 461	Gas Dynamics	3.50
MECH 462	Turbomachinery and Propulsion	3.00
MECH 465	Gas Turbine Design	3.50
MECH 480	Flight Control Systems	3.50
MECH 481	Materials Engineering for Aerospace	3.00
MECH 482	Avionic Navigation Systems	3.00
MECH 485	Introduction to Space Systems	3.00
MECH 486	Aircraft Stress Analysis	3.00
MECH 487	Design of Aircraft Structures	3.00
MECH 498	Topics in Mechanical Engineering	3.00

2. Option B — Design and Manufacturing

Students must complete the following compulsory courses from the Option Core and at least 12.25 credits from the Option Electives.

Option B Core		Credits
MECH 412	Computer-Aided Mechanical Design	3.50
MECH 490B	Capstone Mechanical Engineering Design Project	4.00
Option B Electives		Credits
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00

INDU 372	Quality Control and Reliability	3.00
INDU 410	Safety Engineering	3.50
INDU 411	Computer Integrated Manufacturing	3.50
INDU 440	Product Design and Development	3.00
MECH 411	Instrumentation and Measurements	3.50
MECH 414	Computer Numerically Controlled Machining	3.50
MECH 415	Advanced Programming for Mechanical and Industrial Engineers	3.00
MECH 421	Mechanical Shaping of Metals and Plastics	3.50
MECH 422	Mechanical Behaviour of Polymer Composite Materials	3.00
MECH 423	Casting, Welding, Heat Treating, and Non-Destructive Testing	3.50
MECH 424	MEMS — Design and Fabrication	3.50
MECH 425	Manufacturing of Composites	3.50
MECH 426	Stress and Failure Analysis of Machinery	3.00
MECH 460	Finite Element Analysis	3.75
MECH 498	Topics in Mechanical Engineering	3.00

3. Option C — Systems and Mechatronics

Students must complete the following compulsory course from the Option Core and at least 15.75 credits from the Option Electives.

Option C Core		Credits
MECH 490C	Capstone Mechanical Engineering Design Project	4.00
Option C Electives		Credits
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00
ENGR 472	Robot Manipulators	3.50
MECH 411	Instrumentation and Measurements	3.50
MECH 415	Advanced Programming for Mechanical and Industrial Engineers	3.00
MECH 444	Guided Vehicle Systems	3.00
MECH 447	Fundamentals of Vehicle System Design	3.50
MECH 448	Vehicle Dynamics	3.00
MECH 454	Vehicular Internal Combustion Engines	3.00
MECH 463	Fluid Power Control	3.50
MECH 471	Microcontrollers for Mechatronics	3.50
MECH 472	Mechatronics and Automation	3.50
MECH 473	Control System Design	3.50
MECH 474	Mechatronics	3.75
MECH 480	Flight Control Systems	3.50
MECH 482	Avionic Navigation Systems	3.00
MECH 498	Topics in Mechanical Engineering	3.00

71.40.2 Course Requirements (BEng in Industrial Engineering)

The program in Industrial Engineering consists of the Engineering Core, the Industrial Engineering Core, and elective credits as shown below. The minimum length of the program is 120 credits.

Engineering Core (27 credits)

See §71.20.5.

Industrial Engineering Core		Credits
ENGR 244	Mechanics of Materials	3.75
ENGR 245	Mechanical Analysis	3.00
ENGR 251	Thermodynamics I	3.00
ENGR 311	Transform Calculus and Partial Differential Equations	3.00
INDU 211	Introduction to Production and Manufacturing Systems	3.00
INDU 311	Simulation of Industrial Systems	3.50
INDU 320	Production Engineering	3.00
INDU 321	Lean Manufacturing	3.00
INDU 323	Operations Research I	3.00
INDU 324	Operations Research II	3.00
INDU 330	Engineering Management	3.00
INDU 371	Stochastic Models in Industrial Engineering	3.00
INDU 372	Quality Control and Reliability	3.00
INDU 411	Computer Integrated Manufacturing	3.50

INDU 412	Human Factors Engineering	3.50
INDU 421	Facilities Design and Material Handling Systems	3.50
INDU 423	Inventory Control	3.50
INDU 490	Capstone Industrial Engineering Design Project	4.00
MECH 211	Mechanical Engineering Drawing	3.50
MECH 215	Programming for Mechanical and Industrial Engineers	3.50
MECH 221	Materials Science	3.00
MECH 311	Manufacturing Processes	3.75
MECH 313	Machine Drawing and Design	3.00
		<hr/> 75.00

Electives

Students must complete a minimum of 18 credits from the following courses, with no more than two of the courses marked *.

		<i>Credits</i>
BTM 430*	Enterprise Resource Planning and Information Technology Integration	3.00
BTM 480*	Project Management	3.00
DESC 478*	Data Mining Techniques	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00
INDU 410	Safety Engineering	3.50
INDU 440	Product Design and Development	3.00
INDU 441	Introduction to Six Sigma	3.00
INDU 442	Logistics Network Models	3.00
INDU 466	Decision Models in Service Sector	3.00
INDU 475	Advanced Concepts in Quality Improvement	3.00
INDU 498	Topics in Industrial Engineering	3.00
MANA 300*	Entrepreneurship: Launching Your Business	3.00
MECH 370	Modelling, Simulation and Control Systems	3.50
MECH 371	Analysis and Design of Control Systems	3.75
MECH 415	Advanced Programming for Mechanical and Industrial Engineers	3.00

Faculty*Chair*

MOHAMMED ZAHEERUDDIN, PhD *Alta.*, PEng, Professor

Associate Chair

SAMUEL LI, PhD *Norwegian Inst. Tech.*, APEG (B.C.), Associate Professor

Professors

HASHEM AKBARI, PhD *Calif. (Berkeley)*
ANDREAS K. ATHENITIS, PhD *Wat.*, ing., *Provost's Distinction*
MARIA ELEKTOROWICZ, PhD *Warsaw Tech.*, ing., *Provost's Distinction*
PAUL P. FAZIO, PhD *Windsor*, ing., *Provost's Distinction*
KINH H. HA, DEng *Sir G. Wms.*, ing.
FARIBORZ HAGHIGHAT, PhD *Wat.*, PEng, *Provost's Distinction*
ADEL M. HANNA, PhD *Tech. U.N.S.*, ing., *Provost's Distinction*
OSAMA MOSELHI, PhD *C'dia.*, ing., *Provost's Distinction*
CATHERINE MULLIGAN, PhD *McG.*, ing.
OSCAR A. PEKAU, PhD *Wat.*, ing., *Provost's Distinction*
AMRUTHUR S. RAMAMURTHY, PhD *Purdue*, ing., *Provost's Distinction*
THEODORE STATHOPOULOS, PhD *W. Ont.*, ing., *Provost's Distinction*
RADU G. ZMEUREANU, PhD *C'dia.*, ing.

Distinguished Professors Emeriti

DOREL FELDMAN, PhD *Iasi*
CEDRIC MARSH, MA *Camb.*
ZENON A. ZIELINSKI, DTechSc *Poly. Warszawska*

Professors Emeriti

SABAH TOMA ALKASS, PhD *Lough.*, PEng, *Provost's Distinction*
BALA ASHTAKALA, PhD *Wat.*
RICHARD W. GUY, PhD *Liv.*, PEng
HORMOZ B. POOROOSHASB, PhD *Camb.*

Associate Professors

CIPRIAN ALECSANDRU, PhD *Louisiana State*, PEng
ASHUTOSH BAGCHI, PhD *Car.*, PEng
ZHI CHEN, PhD *Regina*, APEGs
KHALED GALAL, PhD *McM.*, PEng
MICHELLE NOKKEN, PhD *Tor.*, PEng
TAREK ZAYED, PhD *Purdue*, PEng
ATTILA M. ZSAKI, PhD *Tor.*, PEng

Assistant Professors

LUIS AMADOR, PhD *New Br.*, PEng
ANJAN BHOWMICK, PhD *Alta.*, APPEGA
HUA GE, PhD *C'dia.*, APEG (B.C.)
LAN LIN, PhD *Ott.*
MD. SAIFUR RAHAMAN, PhD *Br. Col.*
LUCIA TIRCA, PhD *Tech. Civil Engr. Buch.*, ing.
LIANGZHU WANG, PhD *Purdue*
ZHENHUA ZHU, PhD *GT.*

Extended Term Appointments

JASSIM HASSAN, PhD *Calg.*
CHRISTOPHER WILLIS, PhD *New Br.*, PEng

Affiliate Professors
SUZELLE BARRINGTON, PhD McG., ing., Agr.
KENNETH LEE, PhD Tor.

Affiliate Associate Professors
ALI BAHLOUL, PhD Havre
LALEH YERUSHALMI, PhD McG.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 006.139
514-848-2424, ext. 3200
514-848-2424, ext. 7800

Objectives

Building Engineering, as a discipline, encompasses the body of knowledge which pertains to all phases in the life-cycle of a constructed facility, namely conception, planning, design, construction, operation, and disposal. Concordia has a unique undergraduate program leading to a BEng in Building Engineering designed to meet the needs of the construction industry for engineers familiar with the overall design of built facilities. In addition to the basic engineering sciences, the program emphasizes the fundamentals of building materials, structural analysis and design, building services (acoustical, heating, lighting, air conditioning), economics, and project management. The student also has available certain electives which will be of use in the design of various phases of a building. Students who complete all but one of their 200- and 300-level courses with a sufficiently high standing may apply through the Associate Dean, Student Academic Services to enter a combined program leading to the joint award of both a BEng and an MEng degree in Building Engineering. It is expected that those who aspire to leadership roles within the building industry will enter such a combined program. The combined program requires a further 12 months of full-time study, after which graduates will not only have obtained further grounding in the basics, but will also have specialized in one of four branches: Building Science, Building Environment, Building Structures, Construction Management. For details of the graduate component, refer to the School of Graduate Studies Calendar.

71.50.1 Course Requirements (BEng in Building Engineering)

The program in Building Engineering consists of the Engineering Core, the Building Engineering Core, and at least nine elective credits chosen from the elective courses listed below. The normal length of the program is 119 credits.

Engineering Core for Building Engineering (29 credits)*

See §71.20.5. Students in BEng (Bldg) must successfully complete BLDG 482 instead of ENGR 392.

*Note: The Engineering Core credits for students in the Building Engineering program are reduced from 30.5 credits to 29 credits since Building Engineering students are not required to take ENGR 202 (1.5 credits) in their program.

Building Engineering Core		<i>Credits</i>
BCEE 231	Structured Programming and Applications for Building and Civil Engineers	3.00
BCEE 342	Structural Analysis I	3.00
BCEE 343	Structural Analysis II	3.00
BCEE 344	Structural Design I	3.00
BCEE 345	Structural Design II	3.00
BCEE 371*	Surveying	3.00
BCEE 451	Construction Engineering	3.00
BLDG 212	Building Engineering Drawing and Introduction to Design	3.00
BLDG 341	Building Engineering Systems	3.00
BLDG 365	Building Science	3.50
BLDG 366	Acoustics and Lighting	3.50
BLDG 371	Building Service Systems	3.50
BLDG 390	Building Engineering Design Project	3.50
BLDG 463	Building Envelope Design	3.00
BLDG 471	HVAC System Design	4.00
BLDG 476	Thermal Analysis of Buildings	3.00
BLDG 490	Capstone Building Engineering Design Project	4.00
CIVI 321	Engineering Materials	3.75
CIVI 432	Soil Mechanics	3.50

ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 361	Fluid Mechanics I	3.00
		<hr/> 81.00

*Summer course to be taken before entering second year of BEng program.

Elective Courses

A student must choose a minimum of nine credits from the following list of elective courses.

		<i>Credits</i>
BCEE 452	Matrix Analysis of Structures	3.00
BCEE 455	Introduction to Structural Dynamics	3.00
BLDG 462	Modern Building Materials	3.00
BLDG 465	Fire and Smoke Control in Buildings	3.00
BLDG 472	Building Energy Conservation Technologies	3.00
BLDG 473	Building Acoustics	3.00
BLDG 474	Building Illumination and Daylighting	3.00
BLDG 475	Indoor Air Quality	3.00
BLDG 477	Control Systems in Buildings	3.00
BLDG 478	Project Management for Construction	3.00
BLDG 491	Labour and Industrial Relations in Construction	3.00
BLDG 492	Construction Processes	3.00
BLDG 493	Legal Issues in Construction	3.00
BLDG 498	Topics in Building Engineering	3.00
CIVI 435	Foundation Design	3.00
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00

Objectives

Civil Engineering is concerned with the creation of systems of constructed facilities which play an important role in sound economic growth of society. It is also concerned with the development of technologies to combat pollution of air, water, and soil. Civil engineers are responsible for the design of foundations and superstructures of common structures such as buildings, bridges, dams, tunnels, wharves, as well as many unusual structures such as rocket installations, containment vessels for nuclear reactors, supports for radio telescopes, frameworks for aircraft. In addition, they are concerned with the engineering aspects of water resources; transportation facilities; planning metropolitan areas, and conducting and managing their public facilities. In dealing with environmental problems, civil engineers perform vital functions such as monitoring and controlling air, water, and soil quality, assessing the impact of technological changes on the environment, and developing innovative waste reduction technologies.

71.50.2 Course Requirements (BEng in Civil Engineering)

The program in Civil Engineering consists of the Engineering Core, the Civil Engineering Core, and one of the options listed below. The normal length of the program is 119 credits.

Engineering Core (30.5 credits)

Civil Engineering Core		<i>Credits</i>
BCEE 231	Structured Programming and Applications for Building and Civil Engineers	3.00
BCEE 342	Structural Analysis I	3.00
BCEE 343	Structural Analysis II	3.00
BCEE 344	Structural Design I	3.00
BCEE 345	Structural Design II	3.00
BCEE 371*	Surveying	3.00
BCEE 451	Construction Engineering	3.00
CIVI 212	Civil Engineering Drawing and Introduction to Design	3.00
CIVI 231	Geology for Civil Engineers	3.00
CIVI 321	Engineering Materials	3.75

CIVI 341	Civil Engineering Systems	3.00
CIVI 361	Introduction to Environmental Engineering	3.50
CIVI 372	Transportation Engineering	3.00
CIVI 381	Hydraulics	3.50
CIVI 390	Civil Engineering Design Project	3.50
CIVI 432	Soil Mechanics	3.50
CIVI 490	Capstone Civil Engineering Design Project	4.00
ENGR 242	Statics	3.00
ENGR 243	Dynamics	3.00
ENGR 244	Mechanics of Materials	3.75
ENGR 251	Thermodynamics I	3.00
ENGR 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 361	Fluid Mechanics I	3.00
		<hr/> 73.50

*Summer course to be taken before entering second year of BEng program.

Option Course Requirements

Students must complete a minimum of 15 credits from one of the following options: A, B or C. Option A is designed for students interested in careers in structural, geotechnical, and transportation engineering. Option B is tailored for students wishing to pursue careers in environmental engineering. Option C is designed for students interested in construction engineering and management.

Option A – Civil Infrastructure		<i>Credits</i>
BCEE 452	Matrix Analysis of Structures	3.00
BCEE 455	Introduction to Structural Dynamics	3.00
CIVI 435	Foundation Design	3.00
CIVI 437*	Advanced Geotechnical Engineering	3.00
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
CIVI 471	Highway and Pavement Design	3.00
CIVI 474*	Transportation Planning and Design	3.00
CIVI 498	Topics in Civil Engineering	3.00
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00

Note: Students may choose one course marked with * from Option B or C.

Option B – Environmental		<i>Credits</i>
CIVI 382*	Water Resources Engineering	3.50
CIVI 464*	Environmental Impact Assessment	3.00
CIVI 465	Water Pollution and Control	3.50
CIVI 466	Engineering Aspects of Chemical and Biological Processes	3.00
CIVI 467*	Air Pollution and Emission Control	3.00
CIVI 468	Waste Management	3.00
CIVI 469*	Geo-Environmental Engineering	3.50
CIVI 483*	Hydrology	3.00
CIVI 484*	Hydraulic Engineering	3.50
CIVI 498	Topics in Civil Engineering	3.00
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00

Note: Students may choose one course marked with * from Option A or C.

Option C – Construction Engineering and Management (CEM)		<i>Credits</i>
BCEE 464	Project Cost Estimating	3.00
BCEE 465	Construction Planning and Control	3.00
BCEE 466	Simulations and Design of Construction Operations	3.00
BLDG 478*	Project Management for Construction	3.00
BLDG 491	Labour and Industrial Relations in Construction	3.00
BLDG 492	Construction Processes	3.00
BLDG 493	Legal Issues in Construction	3.00
CIVI 440*	Computer Applications in Civil Engineering Practice	3.00
CIVI 498	Topics in Civil Engineering	3.00
ENGR 411	Special Technical Report	1.00
ENGR 412	Honours Research Project	3.00

Note: Students may choose one course marked with * from Option A or B.

ENGINEERING AND COMPUTER SCIENCE

ENCS 272 *Composition and Argumentation for Engineers (3 credits)*

Prerequisite: Completion of all ESL courses required on admission. Fundamentals of English composition and argumentation: grammar; reasoning and persuasion; persuasive proofs; argumentation; structuring and outlining; the problem statement; the body; and the conclusions. Language and persuasion for effective communication in professional engineering. Cultivation of a writing style firmly based on clear and critical thinking skills. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who pass this course with C- or higher will fulfill the Faculty writing skills requirement, and will be eligible to enrol in ENCS 282.

ENCS 282 *Technical Writing and Communication (3 credits)*

Prerequisite: Students must have satisfied the requirements in \$71.20.7 by passing the Engineering Writing Test (EWT), or by passing ENCS 272 with a grade of C- or higher. Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods for engineers and computer scientists. Technical communication using information technology: document processing software, computer-assisted presentation, analysis and design of web presentation, choice and use of appropriate tools. Students will prepare an individual major report and make an oral presentation. Lectures: three hours per week. Tutorial: two hours per week.

ENCS 283 *Innovation and Critical Thinking in Science and Technology (3 credits)*

Prerequisite: Satisfactory completion of University writing skills requirement. Understanding, thinking, arguing, and creativity in science and technology; analyzing and critiquing complex problems using theories of creativity, communication, business, and psychology; exploring the processes of invention and innovation and their impact on economics, popular media, and social and cultural structures; case studies of why some inventions fail and others succeed; examining the role experts and researchers play in the diffusion of ideas. Students will be evaluated on case studies, assignments, and exams. Lectures: three hours per week. Tutorial: one hour per week.

ENCS 393 *Social and Ethical Dimensions of Information and Communication Technologies (3 credits)*

Prerequisite: ENCS 282; 40 credits in BCompSc program. Ethics in an information society; surveillance and privacy; economic globalization and intellectual property in a digital world: the digital divide; computer-based profiling and hacking; electronic democracy; computer-mediated experience; and information productivity and the work/life balance. Lectures: three hours per week. Tutorial: one hour per week.

ENCS 498 *Topics in Engineering and Computer Science (3 credits)*

Prerequisite: Permission of the Faculty. This course may be offered in a given year upon the authorization of the Faculty. The course content may vary from offering to offering.

ENGINEERING

ENGR 108 *Engineering Industrial Experience Reflective Learning I (3 credits)*

Prerequisite: Permission of the Faculty. This course is a reflective learning module for students in their related field which is based on their academic requirements and their first industrial experience.

ENGR 201 *Professional Practice and Responsibility (1.5 credits)*

Health and safety issues for engineering projects: Quebec and Canadian legislation; safe work practices; general laboratory safety common to all engineering disciplines, and specific laboratory safety pertaining to particular engineering disciplines. Review of the legal framework in Quebec, particularly the Professional Code and the Engineers Act, as well as professional ethics. Lectures: one and a half hours per week. Tutorial: one hour per week, alternate weeks.

ENGR 202 *Sustainable Development and Environmental Stewardship (1.5 credits)*

Introduction to the concept of sustainable development and the approaches for achieving it. Relationships with economic, social, and technological development. Methods for evaluating sustainability of engineering projects, including utilization of relevant databases and software. Impact of engineering design and industrial development on the environment. Case studies. Lectures: one and a half hours per week.

ENGR 208 *Engineering Industrial Experience Reflective Learning II (3 credits)*

Prerequisite: ENGR 108 and permission of the Faculty. This course expands on the students' second industrial experience term in their related field of study to further develop their knowledge and work-related skills.

ENGR 213 *Applied Ordinary Differential Equations (3 credits)*

Prerequisite: MATH 204 (Cegep Mathematics 105) previously or concurrently; MATH 205 (Cegep Mathematics 203). This course introduces Engineering students to the theory and application of ordinary differential equations. Definition and terminology,

initial-value problems, separable differential equations, linear equations, exact equations, solutions by substitution, linear models, orthogonal trajectories, complex numbers, form of complex numbers: powers and roots, theory: linear equations, homogeneous linear equations with constant coefficients, undetermined coefficients, variation of parameters, Cauchy-Euler equation, reduction of order, linear models: initial value, review of power series, power series solutions, theory, homogeneous linear systems, solution by diagonalisation, non-homogeneous linear systems. Eigenvalues and eigenvectors. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 233 *Applied Advanced Calculus* (3 credits)

Prerequisite: MATH 204 (Cegep Mathematics 105); MATH 205 (Cegep Mathematics 203). This course introduces Engineering students to the theory and application of advanced calculus. Functions of several variables, partial derivatives, total and exact differentials, approximations with differentials. Tangent plane and normal line to a surface, directional derivatives, gradient. Double and triple integrals. Polar, cylindrical, and spherical coordinates. Change of variables in double and triple integrals. Vector differential calculus; divergence, curl, curvature, line integrals, Green's theorem, surface integrals, divergence theorem, applications of divergence theorem, Stokes' theorem. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 242 *Statics* (3 credits)

Prerequisite: ENGR 213 previously or concurrently; PHYS 204; MATH 204. Resultant of force systems; equilibrium of particles and rigid bodies; distributed forces; statically determinate systems; trusses; friction; moments of inertia; virtual work. Shear and bending moment diagrams. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 243 *Dynamics* (3 credits)

Prerequisite: ENGR 213, 242. Kinematics of a particle and rigid body; forces and accelerations; work and energy; impulse and momentum; dynamics of a system of particles and rigid bodies, introduction to vibrations. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 244 *Mechanics of Materials* (3.75 credits)

Prerequisite: ENGR 213; ENGR 242 or 245; ENGR 233 previously or concurrently. Mechanical behaviour of materials; stress; strain; shear and bending moment diagrams; introduction to inelastic action. Analysis and design of structural and machine elements subjected to axial, torsional, and flexural loadings. Combined stresses and stress transformation. Deflections. Introduction to elastic stability. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: three hours per week, alternate weeks.

ENGR 245 *Mechanical Analysis* (3 credits)

Prerequisite: PHYS 204; ENGR 213 previously or concurrently. Forces in a plane and in space, moments of forces, Varignon's theorem, rigid bodies in equilibrium, free-body diagram. Centroids, centres of gravity. Distributed forces, moments of inertia. Principle of virtual work. Kinematics of particles and rigid bodies. Forces and accelerations; work and energy; impulse and momentum. Kinetics of particles and rigid bodies. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for ENCS 245 may not take this course for credit.

ENGR 251 *Thermodynamics I* (3 credits)

Prerequisite: MATH 203 (Cegep Mathematics 103). Basic principles of thermodynamics and their application to various systems composed of pure substances and their homogeneous non-reactive mixtures. Simple power production and utilization cycles. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 301 *Engineering Management Principles and Economics* (3 credits)

Introduction to project delivery systems. Principles of project management; role and activity of a manager; enterprise organizational charts; cost estimating; planning and control. Company finances; interest and time value of money; discounted cash flow; evaluation of projects in private and public sectors; depreciation methods; business tax regulations; decision tree; sensitivity analysis. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 308 *Engineering Industrial Experience Reflective Learning III* (3 credits)

Prerequisite: ENGR 208 and permission of the Faculty. This course further expands on the students' third industrial experience in their related field of study to further develop their knowledge and work-related skills.

ENGR 311 *Transform Calculus and Partial Differential Equations* (3 credits)

Prerequisite: ENGR 233. Elements of complex variables. The Laplace transform: Laplace transforms and their properties, solution of linear differential equations with constant coefficients. Further theorems and their applications. The Fourier transform: orthogonal functions, expansion of a function in orthogonal functions, the Fourier series, the Fourier integral, the Fourier transform, the convolution theorem. Partial differential equations: physical foundations of partial differential equations, introduction to boundary value problems. Lectures: three hours per week. Tutorial: two hours per week.

ENGR 361 *Fluid Mechanics I* (3 credits)

Prerequisite: ENGR 213, 233, 251. Basic concepts and principles of fluid mechanics. Classification of fluid flow. Hydrostatic forces on plane and curved surfaces, buoyancy and stability, fluids in rigid body motion. Mass, momentum, and energy conservation integral equations. Bernoulli equation. Basic concepts of pipe and duct flow. Introduction to Navier-Stokes equations. Similarity and model studies. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 371 Probability and Statistics in Engineering (3 credits)

Prerequisite: ENGR 213, 233. Axioms of probability theory. Events. Conditional probability. Bayes theorem. Random variables. Mathematical expectation. Discrete and continuous probability density functions. Transformation of variables. Probabilistic models, statistics, and elements of hypothesis testing (sampling distributions and interval estimation). Introduction to statistical quality control. Applications to engineering problems. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 391 Numerical Methods in Engineering (3 credits)

Prerequisite: ENGR 213, 233; COMP 248 or COEN 243 or MECH 215 or BCEE 231. Roots of algebraic and transcendental equations; function approximation; numerical differentiation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.

ENGR 392 Impact of Technology on Society (3 credits)

Prerequisite: ENCS 282; ENGR 201, 202. Social history of technology and of science including the industrial revolution and modern times. Engineering and scientific creativity, social and environmental problems created by uncontrolled technology, appropriate technology. Lectures: three hours per week.

NOTE: Students who have received credit for ENGR 492 may not take this course for credit.

ENGR 411 Special Technical Report (1 credit)

Prerequisite: ENCS 282; permission of the Department. Students must submit a report on a topic related to the students' discipline and approved by the Department. The report must present a review of a current engineering problem, a proposal for a design project, or a current engineering practice.

NOTE: Students who have received credit for ENGR 410 may not take this course for credit.

ENGR 412 Honours Research Project (3 credits)

Prerequisite: ENCS 282; minimum 75 credits in the BEng program with a CGPA of 3.00 or better; permission of the Department. Students work on a research project in their area of concentration, selected in consultation with and conducted under the supervision of a faculty member of the Department. The student's work must culminate in a final report, as well as an oral presentation. Students planning to register for this course should consult with the Department prior to term of planned registration. Intended for students with potential interest in graduate programs.

NOTE: Must be approved by the Department prior to registration.

ENGR 417 Standards, Regulations and Certification (3 credits)

Overview of DoT and other international aviation standards (e.g. FAA), regulations and certification procedures; regulatory areas, namely, pilot training/testing, air traffic procedures, aircraft systems design and airworthiness; development process for new regulations and criteria for certification. Lectures: three hours per week.

NOTE: Students who have received credit for this topic under an ENGR 498 number may not take this course for credit.

ENGR 418 Integration of Avionics Systems (3 credits)

Prerequisite: MECH 482 or ELEC 416. Introduction to the basic principles of integration of avionics systems; review of Earth's geometry and Newton's laws; inertial navigation sensors and systems (INS); errors and uncertainty in navigation; Global Positioning System (GPS); differential and carrier tracking GPS applications; terrestrial radio navigation systems; Kalman filtering; integration of navigation systems using Kalman filtering; integration of GPS and INS using Kalman filtering. Lectures: three hours per week.

ENGR 472 Robot Manipulators (3.5 credits)

Prerequisite: ELEC 372 or MECH 371. Spatial descriptions and transformations. Manipulator forward and inverse kinematics. Jacobians: velocities and static forces. Manipulator dynamics. Trajectory generation. Position control of manipulators. Force control of manipulators. Robot programming languages. Lectures: three hours per week. Laboratory: 15 hours total.

ENGR 498 Topics in Engineering (3 credits)

Prerequisite: Permission of the Faculty. This course may be offered in a given year upon the authorization of the Faculty. The course content may vary from offering to offering.

BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING**BCEE 231 Structured Programming and Applications for Building and Civil Engineers** (3 credits)

Prerequisite: MATH 204; ENGR 242 previously or concurrently. Elements of procedural programming: variables, primitive data types, scope, operators and expressions, control structures, functions, derived data types and basic data structures. Program structure and development: specifications, analysis of requirements, flow charting, incremental development, testing, validation and program documenting. Application of procedural programming, graphics and numerical tool box to mathematics and building, civil and environmental engineering. Lectures: three hours per week. Tutorial: two hours per week.

BCEE 342 Structural Analysis I (3 credits)

Prerequisite: ENGR 244. Analysis of statically determinate structures: deflections, strain energy concepts, virtual work principles. Mueller Breslau principle, influence lines. Approximate methods for statically indeterminate structures. Collapse load analysis. Cables and Arches. Computer applications. Lectures: three hours per week. Tutorial: two hours per week.

BCEE 343 *Structural Analysis II* (3 credits)

Prerequisite: BCEE 342. Analysis of statically indeterminate structures: the methods of consistent deformations, slope deflection, and moment distribution. Application of virtual work principles. Introduction to matrix methods. Computer applications. Lectures: three hours per week. Tutorial: one hour per week.

BCEE 344 *Structural Design I* (3 credits)

Prerequisite: BCEE 342. Basis for limit states design. Code requirements. Structural steel design: tension and compression members, beams and beam-columns. Connections. Introduction to the design of timber members. Lectures: three hours per week. Tutorial: two hours per week.

BCEE 345 *Structural Design II* (3 credits)

Prerequisite: BCEE 342. Behaviour of reinforced concrete elements in flexure, compression, shear and bond. Limit states design of reinforced concrete beams, one-way slabs, columns, and footings. Serviceability limits states. Introduction to prestressed concrete and masonry structures. Design examples. Lectures: three hours per week. Tutorial: two hours per week.

BCEE 371 *Surveying* (3 credits)

Prerequisite: BLDG 212 or CIVI 212. Elementary operations employed in engineering surveying; use, care, and adjustment of instruments; linear and angular measurements; traversing; earthwork calculations; theory of errors; horizontal and vertical curves and curve layout; slope stakes and grades, application of surveying methods to city, topographic surveying, and introduction to advanced surveying techniques; use of digital computers in surveying calculations. Summer school taken before entering second year of study in the BEng program. Lectures and fieldwork: eight hours per day; six days per week for three weeks.

BCEE 451 *Construction Engineering* (3 credits)

Prerequisite: BLDG 341 or CIVI 341. The nature of construction and the environment in which the industry works; organizational structures for project delivery; construction contracts and documents; introduction to construction processes: excavation and site works, foundation layout, concrete form design, concrete, steel, timber, and masonry construction; project planning, scheduling, and control; construction safety. Lectures: three hours per week.

BCEE 452 *Matrix Analysis of Structures* (3 credits)

Prerequisite: ENGR 213, 233; BCEE 343. Classical and matrix methods of structural analysis; influence coefficients, transformation matrices. Matrix formulation of the force and of the displacement methods of analysis. Direct stiffness approach; sub-structure technique. Introduction to finite-element method. Computer applications. Lectures: three hours per week.

BCEE 455 *Introduction to Structural Dynamics* (3 credits)

Prerequisite: ENGR 243, 391; BCEE 342. Theory of vibration. Dynamic response of simple structural systems. Effects of blast, wind, traffic, and machinery vibrations. Basic concepts in earthquake resistant design. Computer applications. Lectures: three hours per week.

BCEE 464 *Project Cost Estimating* (3 credits)

Prerequisite: ENGR 301. Techniques and procedures used for estimating cost of construction projects. Cost estimation process; elements of project cost; conceptual and detailed cost estimation methods; risk assessment and range estimating; case studies; computer-aided estimating.

BCEE 465 *Construction Planning and Control* (3 credits)

Prerequisite: BLDG 478. Methods of delivering construction. Contractual relationships and organizational structures. Phases of project development. Estimating resource requirements; costs and durations. Bidding strategies. Network analysis using CPM and PERT, time-cost trade-off, resource allocation. Cash flow analysis. Earned-value concept for integrated time and cost control. Quality control. Value engineering. Lectures: three hours per week.

BCEE 466 *Simulations and Design of Construction Operations* (3 credits)

Prerequisite: BCEE 451. Principles of modelling and simulation. Classification and validation of simulation models. Analysis of input data and outputs. Object Oriented Simulation (OOS). Simulation languages. Application of discrete event simulation in construction operations including earthmoving operations, building construction operations, and tunnelling operations.

BUILDING ENGINEERING

BLDG 212 *Building Engineering Drawing and Introduction to Design* (3 credits)

Fundamentals of technical drawing, dimensioning practices, orthographic projections, auxiliary and sectional views of buildings. Theory and applications of descriptive geometry in building design. Computer-aided building drawing. Building sub-systems and related graphics standards; architectural and building engineering drawing at preliminary and final stages. Introduction to the design of light-frame buildings. Project: representation of a building and its sub-systems. Introduction to conceptual design. Lectures: three hours per week. Tutorial: two hours per week.

BLDG 341 *Building Engineering Systems* (3 credits)

Prerequisite: BCEE 231 previously or concurrently. Introduction to systematic solution of building engineering problems. Techniques treated include linear programming, network analysis, nonlinear programming. Introduction to decision analysis and simulation. Application of optimization methods for solution of design problems in building science, building environment, building structures, and construction management, taking into account sustainability issues. Lectures: three hours per week.

BLDG 365 *Building Science* (3.5 credits)

Prerequisite: ENGR 251. General introduction to the thermal environment and sustainable development issues. Topics include heat, temperature, one-dimensional steady-state processes. Convection: natural and forced. Radiation. Combined radiative and convective surface transfer. Psychrometrics. Thermal comfort. Air quality. Condensation: surface and interstitial. Introduction to compressible viscous flow, friction, and flow in pipes; boundary layer and wind effects. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

BLDG 366 *Acoustics and Lighting* (3.5 credits)

Prerequisite: ENGR 243. General introduction to the aural and visual environment. Psychological impact of environment. Subjective and objective scales of measurement. Introduction to vibration. The hearing mechanism. Transmission of sound, passive control of noise in buildings, transmission loss, absorption and reverberation time. Room acoustic assessment. Active control of the aural environment. Visual perception. Photometry, brightness, luminance, and illumination. Concept of natural lighting in building. Artificial lighting; light sources; luminaires. Colorimetry. Calculation methods for artificial lighting. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

BLDG 371 *Building Service Systems* (3.5 credits)

Prerequisite: BLDG 365 previously or concurrently. Principles of building service systems, including electrical, gas, communications, service-water supply and distribution; introduction to plans, codes, and standards for utility distribution systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

BLDG 390 *Building Engineering Design Project* (3.5 credits)

Prerequisite: BLDG 341; ENCS 282; BCEE 344 previously or concurrently. The project of each team will encompass the conceptual and preliminary design of a new medium-size building. Students learn building engineering design process, methodology, identification of objectives, building codes, formulation of design problems. Development and evaluation of sustainable building design alternatives. Conceptual building design: spatial requirements, design of space layout. Preliminary building design: synthesis and design of structures, enclosure systems, and services (HVAC, lighting, electrical distribution) using computer-aided design tools. Performance evaluation using modelling, sensitivity analysis and cost estimation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

BLDG 462 *Modern Building Materials* (3 credits)

Prerequisite: CIVI 321. Engineering properties of building materials such as: plastics, synthetic fibres, adhesives, sealants, caulking compounds, foams, sandwich panels, composites, polymer concrete systems, fibre-reinforced concretes, plastic mortars, polymers for flooring, roofing, synthetic wall papers. Their structural, thermal, and acoustical properties. Consideration of corrosion, bio- and thermal-degradation, stability to ultraviolet and solar radiation. Laboratory sessions to illustrate synthesis, application, testing, deterioration, and protection. Lectures: three hours per week.

BLDG 463 *Building Envelope Design* (3 credits)

Prerequisite: BLDG 365; CIVI 321. Technical influences in the design of building envelope, including the control of heat flow, air and moisture penetration, building movements, and deterioration. Application of air/vapour barrier and rain-screen systems. Performance assessment and building codes through case studies and design projects. Sustainable design principles. Design of walls, roofs, joints and assemblies. Cause of deterioration and preventive measures, on-site investigation. Relevant building codes and standards. Lectures: three hours per week.

BLDG 465 *Fire and Smoke Control in Buildings* (3 credits)

Prerequisite: BLDG 365. Topics treated include fire and smoke control; failure mechanisms of building enclosure illustrated by case studies; code requirements for enclosure systems; systems approach for fire safety. Lectures: three hours per week.

BLDG 471 *HVAC System Design* (4 credits)

Prerequisite: BLDG 371; BLDG 476 previously or concurrently. Principles of HVAC system design and analysis; sustainable design issues and impact on environment; component and system selection criteria including room air distribution, fans and air circulation, humidifying and dehumidifying processes, piping and ducting design. Air quality standards. Control systems and techniques; operational economics; computer applications. Lectures: three hours per week. Laboratory: two hours per week.

BLDG 472 *Building Energy Conservation Technologies* (3 credits)

Prerequisite: BLDG 471 previously or concurrently. Standards of energy efficiency in buildings. Trends in energy consumption. Energy audit: evaluation of energy performance of existing buildings, weather normalization methods, measurements, disaggregation of total energy consumption, use of computer models, impact of people behaviour. Energy efficiency measures in buildings: approaches, materials and equipments, operating strategies, evaluation methods of energy savings. Renewable energy sources: passive or active solar systems, geothermal systems, free-cooling. Optimum selection of energy sources. Impact of emerging technologies. Case studies. Lectures: three hours per week.

BLDG 473 *Building Acoustics* (3 credits)

Prerequisite: BLDG 366. Noise control criteria and regulations, instrumentation, noise sources, room acoustics, walls, barriers and enclosures, acoustical materials and structures, vibration and noise control systems for buildings. Lectures: three hours per week.

BLDG 474 *Building Illumination and Daylighting* (3 credits)

Prerequisite: BLDG 366. Production, measurement and control of light. Photometric quantities, visual perception and colour theory. Daylight and artificial illumination systems. Radiative transfer, fixture and lamp characteristics, control devices and energy

conservation techniques. Design of lighting systems. Solar energy utilization and daylighting. Integration of lighting systems with mechanical systems for energy conservation and sustainable development. Lectures: three hours per week.

BLDG 475 *Indoor Air Quality* (3 credits)

Prerequisite: BLDG 371 previously or concurrently. Elements of indoor air quality, physical/ chemical characteristics of contaminants, health effects, standard requirements. Estimation of the levels of indoor air contaminants in buildings. Design of ventilation systems for pollutant control. Air pollution due to outdoor air supply through ventilation systems. Effect of outdoor air pollution on indoor air quality. Lectures: three hours per week.

BLDG 476 *Thermal Analysis of Buildings* (3 credits)

Prerequisite: BLDG 365; ENGR 361. Two- and three-dimensional steady-state and transient conductive heat transfer together with convection and radiation as applied to building materials and geometries. Heating and cooling load analysis, including building shapes, construction type, solar radiation, infiltration, occupancy effects, and daily load variations. Computer applications for thermal load analysis. Introduction to heat exchangers. Lectures: three hours per week. Tutorial: one hour per week.

BLDG 477 *Control Systems in Buildings* (3 credits)

Prerequisite: BLDG 371 previously or concurrently. Introduction to automatic control systems. Control issues related to energy conservation, indoor air quality and thermal comfort in buildings. Classification of HVAC control systems. Control system hardware: selection and sizing of sensors, actuators and controllers. Practical HVAC control systems; elementary local loop and complete control systems. Designing and tuning of controllers. Building automation systems. Case studies. Lectures: three hours per week.

BLDG 478 *Project Management for Construction* (3 credits)

Prerequisite: BLDG 341 or CIVI 341. Introduction to project management techniques in construction, including project delivery methods, construction contracts, cost estimating and bidding planning and scheduling, cash flow analysis, project tracking and control, computer applications. Lectures: three hours per week.

BLDG 482 *Impact of Technology on Society and Architecture* (3 credits)

Prerequisite: 20 courses in the BEng program. History of architecture as the confluence of social and technological evolution. Methodology and thought processes in the theory and design of cities and the human habitat. Impact of technology on society. Energy conservation, environmental constraints and sustainability issues. Lectures: three hours per week.

BLDG 490 *Capstone Building Engineering Design Project* (4 credits)

Prerequisite: Minimum of 75 credits in the BEng (Bldg) program including ENCS 282; BCEE 344, 345; BLDG 371, 390; ENGR 301. The project of each team will encompass the integrated design of at least three sub-systems of a new or retro-fitted building to achieve high performance and efficiency at reasonable cost; sustainable design issues and environmental impact be addressed in all projects. In the process, students learn, through case studies and literature survey, the information gathering and decision/design process, problem-resolution as well as aspects related to management, teamwork and communication. Students registering for this course must contact the course coordinator for the detailed procedure. Lectures: two hours per week, two terms.

BLDG 491 *Labour and Industrial Relations in Construction* (3 credits)

Prerequisite: ENGR 301. The study of labour legislation with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration, and arbitration. Review of actual contracts, discussion of future trends. Lectures: three hours per week.

BLDG 492 *Construction Processes* (3 credits)

Prerequisite: BCEE 451 or ENGR 451. A study of current construction methods and techniques. The subjects include site preparation and earth-work, wood framing, masonry, concrete forming, slip forming, precast construction, industrialized building, deep excavation shoring and underpinning. Design, erection, and removal of temporary construction work. Current field practice and safety considerations. Site visits. Lectures: three hours per week.

BLDG 493 *Legal Issues in Construction* (3 credits)

Prerequisite: ENGR 301. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm. Emphasis on Quebec law and institutions. Lectures: three hours per week.

BLDG 498 *Topics in Building Engineering* (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Department. The course content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

CIVIL ENGINEERING

CIVI 212 *Civil Engineering Drawing and Introduction to Design* (3 credits)

Fundamentals of technical drawing, orthographic projections, sectional views. Computer-aided drawing; slabs, beams, and columns; steel structures; building trusses and bridges, wood and masonry structures. Working drawing and dimensioning practice. Introduction to the design process. Lectures: three hours per week. Tutorial: two hours per week.

CIVI 231 *Geology for Civil Engineers* (3 credits)

Basic principles of physical and structural geology with emphasis on topics related to civil engineering, study of minerals, rocks and soil types, load formation, techniques of air-photo interpretations, and geological mapping. Geological site investigation. Preparation and interpretation of engineering geology reports. Lectures: three hours per week. Tutorial: one hour per week.

CIVI 321 *Engineering Materials* (3.75 credits)

Prerequisite: CHEM 205 or equivalent. Linear and nonlinear material behaviour, time-dependent behaviour; structural and engineering properties of structural metals; behaviour of wood; production and properties of concrete; bituminous materials, ceramics, plastics; introduction to composite materials. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

CIVI 341 *Civil Engineering Systems* (3 credits)

Prerequisite: BCEE 231 previously or concurrently. Development of concepts and techniques commonly associated with systems engineering which are applicable to design and operation of systems that concern civil engineers. Design and planning process; problem formulation, optimization concepts, linear programming, decision analysis; system simulation; network planning and project scheduling; computer applications. The techniques developed are used to solve problems in transportation, water resources, structures, and construction management. Lectures: three hours per week.

CIVI 361 *Introduction to Environmental Engineering* (3.5 credits)

Prerequisite: ENGR 361. Ecosystems considerations, food chain, natural decomposition, and recycling; environmental problems and impact of engineering activities. Various modes of pollution, water, air, and soil contamination, noise pollution; pollution measurement and quantification. Water and waste-water physical, chemical and biological characteristics; turbidity and colour, dissolved oxygen, hardness, pH, alkalinity, organic content, sampling and analysis, chemical and biochemical oxygen demand. Basic processes of treatment: flocculation and coagulation, sedimentation, filtration. Lectures: three hours per week. Tutorial: two hours per week, alternate weeks. Laboratory: two hours per week, alternate weeks.

CIVI 372 *Transportation Engineering* (3 credits)

Prerequisite: BCEE 371; CIVI 341. Fields of transportation engineering; transportation's roles in society; planning and design of road, rail, air, and water-way system components: terminals, right-of-way; control systems: evaluation of alternative modes and decision-making process; introduction to computer-aided design and management of systems. Lectures: three hours per week. Tutorial: one hour per week.

CIVI 381 *Hydraulics* (3.5 credits)

Prerequisite: ENGR 361, 391. Basic hydrodynamics; boundary layer theory, principle of energy losses. Steady flow in open channel; uniform flow, specific energy and critical flow, transition; gradually varied flow in channels and conduits, water surface profiles, computer applications. Flow measurement in open channel, weirs, overflow spillways. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 382 *Water Resources Engineering* (3.5 credits)

Prerequisite: CIVI 381; ENGR 391 or EMAT 391. Sources of water: surface water, groundwater, water quantities and requirements. Water use cycle. Characteristics of water and wastewater. Demand forecast, water use prediction and planning. Groundwater withdrawal and well hydraulics. Water supply network analysis, design of distribution systems, storage, pumping. Sanitary and storm water quantities, urban hydrology. Design of sewer systems, interceptors, gravity sewer, computer applications. Sustainable use of water resources. Design case studies. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 390 *Civil Engineering Design Project* (3.5 credits)

Prerequisite: CIVI 361; ENCS 282; BCEE 344 previously or concurrently. The project of each team will encompass the conceptual and preliminary design of a medium-size civil engineering project. Students learn civil engineering design process, methodology, identification of objectives, codes, formulation of design problems. Development and evaluation of sustainable design alternatives. Computer-aided design tools. Performance evaluation using modelling, sensitivity analysis, and cost estimation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 432 *Soil Mechanics* (3.5 credits)

Prerequisite: ENGR 244. Index properties and classification of soils. Weight-volume relationships. Soil structures. Moisture-density relationships. Permeability, deformation, and strength of soils. Principle of total and effective stresses. Steady state seepage through isotropic soil media. Stress distribution due to external loads and analysis of total settlements. Outline of theory of consolidation. Fundamentals of stability of earth retaining walls, slopes, and footings. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 435 *Foundation Design* (3 credits)

Prerequisite: CIVI 432. Site investigation. Shallow and deep foundations. Bearing capacity and settlement of foundations. Earth-retaining structures, sheet piles, cofferdams, anchors. Foundations subjected to dynamic loading. Foundations on difficult soils, soil improvement and underpinning. Lectures: three hours per week. Tutorial: two hours per week.

CIVI 437 *Advanced Geotechnical Engineering* (3 credits)

Prerequisite: CIVI 432. Mechanical properties of rocks and rock formations. Underground openings in rocks. Slope stability of stratified formations. Foundations on rocks. Rock bolting. Introduction of soil dynamics. Wave propagation in one and two dimensions in elastic media. Seismic waves. Foundations subjected to dynamic loading. Theory of liquefaction. Lectures: three hours per week.

CIVI 440 *Computer Applications in Civil Engineering Practice* (3 credits)

Prerequisite: BCEE 231; 75 credits in the program. General purpose IT tools for civil engineering applications: database programming and web-based tools. Introduction to remote sensing and GIS. Application of major software packages in selected areas of civil engineering practice with emphasis on modelling, data integration, and work-flow. Case studies in structural design, geotechnical engineering, transportation, and environmental engineering. Lectures: two hours per week. Laboratory: two hours per week.

CIVI 453 *Design of Reinforced Concrete Structures* (3.5 credits)

Prerequisite: BCEE 342, 345. Two-way slab systems: flat plate, flat slab and slab-on-beams. Slender columns; columns subjected to biaxial bending. Calculation of lateral loads: wind and seismic. Lateral loads resisting systems: moment-resisting frames, shear walls and coupled shear walls. Prestressed concrete: losses, design requirements for flexure, shear, bond, anchorage and deflections. Design project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 454 *Design of Steel Structures* (3.5 credits)

Prerequisite: BCEE 342, 344. Trends and developments in structural-steel design. Framing systems. Floor systems; composite construction; plate girders. Braced frames; moment-resisting frames. Connections. P-Delta effects. Introduction to steel-bridge design. Design project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 464 *Environmental Impact Assessment* (3 credits)

Prerequisite: CIVI 361. Engineering activities and the environment; environmental ethics. Prediction and estimation of impact on air, water, soil quality, and biological, socio-economic, cultural environments. Water and air pollution laws, solid and hazardous waste laws. Environmental inventories, assessment preparation, and review. Federal and provincial laws and regulations on environmental assessment. Strategies for environmental compliance, resolution of environmental conflicts. Case studies. Lectures: three hours per week.

CIVI 465 *Water Pollution and Control* (3.5 credits)

Prerequisite: CIVI 361. Physical, chemical, and biological characteristics of water, water quality standards, reaction kinetics and material balances, eutrophication. Containment of reactive contaminants. Natural purification processes in water systems, adsorption, absorption; diffusion and dispersion, oxidation. Large-scale transport of contaminants, single and multiple source models; modelling of transport processes, computer simulation. Introduction to ground-water pollution, sea-water intrusion. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 466 *Engineering Aspects of Chemical and Biological Processes* (3 credits)

Prerequisite: CIVI 361. Introduction to water purification, chemical treatment, coagulation, disinfection, special purification methods. Primary and secondary waste-water treatment, solution and surface chemistry, microbiological consideration; reaction kinetics, diffusion processes, membrane processes, re-aeration. Biological treatment, activated sludge process, treatment and disposal; biological reactors; aerated lagoons; trickling filter; biological nutrient removal. Tertiary waste-water treatment. Lectures: three hours per week.

CIVI 467 *Air Pollution and Emission Control* (3 credits)

Prerequisite: CIVI 361. Types of air pollutants. Sources of air pollutants, effects of air pollutants on health, vegetation, materials, and the atmosphere; emission standards. Meteorological considerations, dispersion of pollutants in the atmosphere, distribution and cleansing of particle matter, atmospheric photochemical reactions. Particulate pollutant control, source correction, cooling treatment; control of gaseous pollutant, point sources, odour control; measurement techniques; computer applications. Lectures: three hours per week.

CIVI 468 *Waste Management* (3 credits)

Prerequisite: CIVI 361. Solid waste; source and generation, sampling and analysis, collection, transport, and storage. Waste recycling, physical and chemical reduction; drying; energy recovery; disposal of solid waste. Sanitary and secure landfill planning, site selection, design and operation; chemical and biological reactions. Hazardous waste, chemical and physical characteristics, handling, processing, transportation, and disposal. Resource recovery alternatives, material exchanges, hazardous waste management facilities, incinerators, landfills. Lectures: three hours per week.

CIVI 469 *Geo-Environmental Engineering* (3.5 credits)

Prerequisite: CIVI 361. Structure and surface chemistry of soil, ion exchange, hydrolysis equilibrium, adsorption. Biochemical degradation, toxic contaminants. Mechanical and thermodynamic equilibrium in soil. Geotechnical considerations in environmental design; soil decontamination. Barrier technologies and soil interaction. Landfill covers and leachate collection systems; subsurface investigation, soil-gas survey. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

CIVI 471 Highway and Pavement Design (3 credits)

Prerequisite: BCEE 371; CIVI 372. Design criteria, including capacity and level of service; route alignment and right-of-way considerations; geometric design; earthworks and construction practices. Pavement materials and tests. Flexible and rigid pavement design procedures; subgrade, base, and surfacing characteristics; loads; stresses in pavement systems; material characterization; pavement response models; effects of natural forces, and construction practices. Pavement management. Computer applications. Geometric and pavement design projects. Lectures: three hours per week. Tutorial: two hours per week.

CIVI 474 Transportation Planning and Design (3 credits)

Prerequisite: CIVI 372. Transportation planning process; data collection and demand analysis; trip generation, trip distribution, modal split and route assignment; forecasting travel patterns. Design of transportation facilities: street sections, intersections, and parking areas. Computer applications and design projects. Lectures: three hours per week. Tutorial: two hours per week, alternate weeks.

CIVI 483 Hydrology (3 credits)

Prerequisite: CIVI 381. Weather elements; precipitation, stage-discharge relations; evapo-transpiration; ground-water flow; stream-flow hydrography, unit hydrography, synthetic hydrographs; laminar flow; hydrologic routing; instantaneous hydrograph; hydraulic routing, method of characteristics, kinematic routing; statistical analysis, confidence intervals, stochastic generator, autoregressive model; applications of hydrology. Lectures: three hours per week. Tutorial: two hours per week.

CIVI 484 Hydraulic Engineering (3.5 credits)

Prerequisite: CIVI 381. Development of surface water resource; basic measurements in hydraulic engineering; storage reservoirs; practical problems; run-off characteristics of natural streams; probabilistic models; control structures; economic analysis; production function; project optimization; energy dissipators; sediment transportation; elements of river engineering; navigation; control of floods; computer modelling application. Design examples. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

CIVI 490 Capstone Civil Engineering Design Project (4 credits)

Prerequisite: Minimum of 75 credits in BEng (Civil) including ENGR 301; CIVI 361, 390; BCEE 344, 345. The project of each team will encompass the integrated design of at least two sub-disciplines of civil engineering to achieve high performance at reasonable cost. Through case studies and literature survey, students learn the information gathering and decision/design process, problem resolution, and aspects related to management, teamwork, and communication. Students registering for this course must contact the course coordinator for the detailed procedure. Lectures: two hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member.

CIVI 498 Topics in Civil Engineering (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the recommendation of the Department and approval of ENCS Council. The course content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

COMPUTER ENGINEERING

COEN 212 Digital Systems Design I (3.5 credits)

Prerequisite: COEN 231. Logic gates and their use in the realization of Boolean algebra statements; logic minimization, multiple output circuits. Designing with MSI and LSI chips, decoders, multiplexers, adders, multipliers, programmable logic devices. Introduction to sequential circuits; flip-flops. Completely specified sequential machines. Machine equivalence and minimization. Implementation of clock mode sequential circuits. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 15 hours total.

NOTE: Students who have received credit for COEN 312 may not take this course for credit.

COEN 231 Introduction to Discrete Mathematics (3 credits)

Prerequisite: MATH 204 (Cegep Mathematics 105). Fundamental principles of counting: rules of sum and product; permutations, arrangements and combinations, the binomial theorem; combinations with repetition; distributions. Fundamentals of logic: basic connectives and truth tables; logical equivalence; the laws of logic; logical implication; rules of inference; the use of quantifiers; proofs of theorems. Sets: the laws of set theory. Boolean algebra. Relation of Boolean algebra to logical and set theoretic operations. Modulo arithmetic: representations of numbers in binary, octal and hexadecimal formats; binary arithmetic. Induction and recursion: induction on natural numbers; recursive definitions. Functions and relations: cartesian products and relations; functions; function composition and inverse functions; computational complexity. Elements of graph theory: basic definitions of graph theory; paths, reachability and connectedness; computing paths from their matrix representation; traversing graphs represented as adjacency lists; trees and spanning trees. Lectures: three hours per week. Tutorial: one hour per week.

COEN 243 Programming Methodology I (3 credits)

Prerequisite: COEN 231 previously or concurrently. Introduction to computer hardware and software, programming and programming paradigms; including low-level programming. Overview of procedural programming languages: key elements; reserved words and identifiers; data types and declarations; statements; arithmetic expressions; different modes of execution. Top-down modular design using functions (and native classes). Flow control using If-Else and Switch statements. Repetition using loops and recursive functions. Simple data types: native and user-defined. Static data structures: arrays and structures.

Overview of object-oriented programming languages. User-defined classes. Class attributes and methods. Object creation, use and destruction. Pointers and an introduction to dynamic data structures. Introduction to streams and files. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COEN 244 *Programming Methodology II* (3 credits)

Prerequisite: COEN 243. Review of object-oriented programming and further concepts. More on classes. Revisiting pointers. Operator overloading: regular and advanced usage. Fundamentals of file and stream processing. Class composition and inheritance: regular and advanced usage. Virtual functions. Polymorphism. Static and dynamic binding. Abstract classes. Case study of a small-scale object-oriented project: simplified analysis, design, and implementation. Introduction to templates, the standard template library, and exception handling. Introduction to dynamic data types. Namespaces. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for COMP 249 may not take this course for credit.

COEN 311 *Computer Organization and Software* (3.5 credits)

Prerequisite: COEN 212, 243, previously or concurrently. Introduction and terminology. Overview of the functional units and the operation of a computer. Machine programming fundamentals: instruction structure, addressing modes, the assembly process, examples of architectures. Case study of a microprocessor architecture: programming model, assembler and addressing modes, instruction set and formats; programming examples. Stacks, subroutines, macros, exceptions, interrupts. Program and interrupt driven I/O. Memory management. Introduction to system software: system kernel, system services, assemblers, compilers, linkers and loaders, user-level view of operating systems. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.

COEN 313 *Digital Systems Design II* (3.5 credits)

Prerequisite: COEN 212. Two-level and multi-level logic optimization techniques. Hardware description languages (VHDL) for synthesis and simulation. Asynchronous design. Algorithmic state machines. Clocking and clock skew. Metastability. Self-timed concepts. Finite state machine (FSM) optimization. State reduction. FSM partitioning. Programmable logic devices and field programmable gate arrays. Data path and control design for processors. Testing issues. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.

COEN 315 *Digital Electronics* (3.5 credits)

Prerequisite: ELEC 311. Analysis and simulation of basic digital circuit blocks, in particular, CMOS, BiCMOS and ECL technologies. The focus is on the electronics aspect of digital circuits. Combinational and sequential circuit units, including logic gates, flip-flops, signal generators, static and dynamic memories, and interconnections. Performance analysis in terms of switching speeds, power dissipation, noise immunity, fan-in and fan-out. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.

COEN 316 *Computer Architecture and Design* (3 credits)

Prerequisite: COEN 212, 311. Review of basic computer architecture designs. Fundamentals of computer design and performance. Cost issues. Instruction set design principles. Memory hierarchies: registers, caches, and virtual memories. Basic processor implementation issues. High performance computing issues such as pipelining, superscalar, and vector processing. Input/output subsystem designs. Lectures: three hours per week. Tutorial: one hour per week.

COEN 317 *Microprocessor Systems* (4 credits)

Prerequisite: COEN 311 or COMP 228 or SOEN 228; COEN 212 or COMP 327. Introduction to microprocessor interfacing. Bus functions, bus interconnections, synchronous and asynchronous bus. Signal flow and data transfer, decoding for I/O and memory, memory organization and structures. Interfacing examples; parallel interfacing, serial interfacing, the interrupt system; bus arbitration and DMA. Analog-to-digital and digital-to-analog structures and interfacing. Floppy disk and CRT controllers; bus standards; local area networks. Benchmarking and comparative study of recent microprocessors. Lectures: three hours per week. Laboratory: 30 hours total.

NOTE: Students who have received credit for COEN 417 may not take this course for credit.

COEN 320 *Introduction to Real-Time Systems* (3 credits)

Prerequisite: COEN 346 or COMP 346. Fundamentals of real-time systems: definitions, requirements, design issues and applications. Real-time operating systems (RTOS) feature: multi-tasking, process management, scheduling, interprocess communication and synchronization, real-time memory management, clocks and timers, interrupt and exception handling, message queues, asynchronous input/output. Concurrent programming languages: design issues and examples, POSIX threads and semaphores. Introduction to real-time uniprocessor scheduling policies: static vs. dynamic, pre-emptive vs. non-pre-emptive, specific techniques — rate-monotonic algorithm, earliest-deadline-first, deadline monotonic, least-laxity-time-first; clock-driven scheduling. Design and specification techniques — Finite state machine based State-chart, Dataflow diagram, Petri nets. Reliability and fault-tolerance. Case studies of RTOS — QNX, VxWorks, and research prototypes. Lectures: three hours per week. Tutorial: one hour per week.

COEN 345 *Software Testing and Validation* (4 credits)

Prerequisite: SOEN 341. Overview of the three phases and deliverables of a project. Validation vs. verification, reviews, walkthrough. Testing: acceptance testing, integration testing, module testing. Writing stubs. Performance testing. Role of formal methods. Code inspection. Defect tracking. Causality analysis. Software Metrics and quality management. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 30 hours total.

COEN 346 *Operating Systems* (4 credits)

Prerequisite: COEN 311; COMP 352 or COEN 352. The evolution, architecture, and use of modern operating systems (OS). Multi-tasking, concurrency and synchronization, IPC, deadlock, resource allocation, scheduling, multi-threaded programming, memory and storage managements, file systems, I/O techniques, buffering, protection and security, the client/server paradigm and communications. Introduction to real time operating systems. Students write substantial programs dealing with concurrency and synchronization in a multi-tasking environment. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 30 hours total.

NOTE: Students who have received credit for COMP 346 may not take this course for credit.

COEN 352 *Data Structures and Algorithms* (3 credits)

Prerequisite: COEN 244. Mathematical introduction: mathematical induction, program analysis, and algorithm complexity. Fundamental data structures: lists, stacks, queues, and trees. Fundamental algorithms: hashing and sorting. Graph structures and algorithms. Overview of algorithm design techniques, including greedy algorithms, divide and conquer strategies, recursive and backtracking algorithms, and heuristics. Application of data structures and algorithms to engineering. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 352 may not take this course for credit.

COEN 390 *Computer Engineering Team Design Project* (3 credits)

Prerequisite: Minimum of 45 credits in BEng (Computer); COEN 244, 311; ENCS 282; ENGR 301. The Team Design Project introduces students to teamwork, project management, engineering design for a complex problem, technical writing and technical presentation in a team environment. Students will be assigned to teams and each team will design and build a device defined by the Department. Students will present their design and demonstrate that their device works in a competition at the end of the term. Tutorial: two hours per week. Equivalent laboratory time: six hours per week.

NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

COEN 413 *Hardware Functional Verification* (3 credits)

Prerequisite: COEN 313. Review of hardware design languages. Introduction to functional verification. Design for verification. Writing test benches, simulation engines, and coverage metrics. Introduction to verification languages. Verification plan: strategies, test cases, test benches. Modelling verification environments. Modelling input relations, intervals, events. Introduction to formal verification tools. Lectures: three hours per week.

COEN 421 *Embedded Systems and Software Design* (4 credits)

Prerequisite: COEN 317, 320; SOEN 341. Introduction to real-time modelling languages. Introduction to embedded systems design using a unified view of software and hardware. Processor technologies: general purpose, single purpose, application-specific. Memory. Interfacing. Design technologies: hardware-software co-design/co-synthesis/co-simulation. Real-time debugging and monitoring techniques. Real-time communication protocols. Introduction to clock synchronization and group communication techniques. A multi-component project provides a hands-on experience in designing, implementing, and testing a real-time embedded system. Lectures: three hours per week. Laboratory: 30 hours total.

COEN 432 *Applied Genetic and Evolutionary Systems* (3 credits)

Prerequisite: COEN 352 or COMP 352. Motivation for the use of Genetic Algorithms (GAs). Theory: the Schema Theorem, the K-armed Bandit, the Building Block Hypothesis, the Idealized GA and comparison of GAs. Methodology: representation, fitness and selection, crossover and mutation, parameterization and constraints, implementation. Applications: function optimization, evolving computer programs, optimizing a pattern recognizer, system modelling. Identification of classes of problems suitable for the use of GAs. Lectures: three hours per week.

COEN 445 *Communication Networks and Protocols* (4 credits)

Prerequisite: COEN 346. Network topologies. Communications protocols basics. Local Area Networks (LANs). Wide Area Networks (WANs). Layered architecture standards (OSI and TCP/IP) and protocols. Internetworking. Lectures: three hours per week. Laboratory: 30 hours total.

NOTE: Students who have received credit for ELEC 463 may not take this course for credit.

COEN 451 *VLSI Circuit Design* (4 credits)

Prerequisite: COEN 212 or COMP 327; ELEC 311. Analysis and design of electronic circuits using Very Large Scale Integration (VLSI) technologies. Physical design of MOS digital circuits. CMOS circuit schematic and layout. CMOS processing technology, design rules and CAD issues. Physical layers and parasitic elements of CMOS circuits. Characterization and performance evaluation. Constraints on speed, power dissipation and silicon space consumption. Design and implementation of CMOS logic structures, interconnections and I/O structures. Circuit design project using a specified CMOS technology. Lectures: three hours per week. Laboratory: 30 hours total.

COEN 490 *Capstone Computer Engineering Design Project* (4 credits)

Prerequisite: Minimum of 75 credits in BEng (Computer) or permission of the Department; ENGR 371; COEN 352, 390; ELEC 311 or SOEN 341. Students are assigned to groups, and work together under faculty supervision to solve a complex interdisciplinary design problem — typically involving communications, control systems, electromagnetics, power electronics, software design, and/or hardware design. The project fosters teamwork between group members and allows students to develop their project

management, technical writing, and technical presentation skills. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

COEN 498 Topics in Computer Engineering (3 credits)

Prerequisite: Permission of the Department. The course, when offered, will include topics which complement elective courses in computer engineering and computer science. Lectures: three hours per week.

ELECTRICAL ENGINEERING

ELEC 251 Fundamentals of Applied Electromagnetics (3 credits)

Prerequisite: ELEC 273 or ENGR 273; ENGR 233 previously or concurrently. Electric charge, Coulomb's law, electrostatic forces, electric field, Gauss' law, electric potential, stored energy. Dielectrics, properties of materials in electric fields. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current-carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism in material media, magnetic circuits. Time-varying fields. Capacitance, resistance, inductance, elements of electric circuits. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 264 Signals and Systems I (3 credits)

Prerequisite: ELEC 273; ENGR 213. Continuous-time and discrete-time signals and systems. Linear Time Invariant (LTI) systems. Convolution-sum and convolution-integral representation of systems. Causal LTI systems. Fourier series representation of continuous-time and discrete-time periodic signals. Filters described by differential or difference equations. The continuous-time Fourier transform. Systems based on linear constant-coefficient differential equations. The discrete-time Fourier transform. Systems based on linear constant-coefficient difference equations. Lectures: three hours per week. Tutorials: two hours per week. *NOTE: Students who have received credit for ELEC 361 may not take this course for credit.*

ELEC 273 Basic Circuit Analysis (3.5 credits)

Prerequisite: ENGR 213 previously or concurrently; PHYS 205. Units: current, voltage, power, and energy. Elementary wave-forms. Time averages. Ohm's law. KVL and KCL. Ideal sources. Mesh and node analysis of resistive circuits. Network theorems. Inductors and capacitors and their response to the application of elementary waveforms. Transient response of simple circuits. Natural frequency and damping. Initial conditions. Steady state AC analysis: resonance, impedance, power factor. Introduction to three phase power, delta and Y connections. Ideal operational amplifiers. Ideal transformers. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 15 hours total.

NOTE: Students who have received credit for ENGR 273 may not take this course for credit.

ELEC 275 Principles of Electrical Engineering (3.5 credits)

Prerequisite: ENGR 213 previously or concurrently; PHYS 205. Fundamentals of electric circuits: Kirchoff's laws, voltage and current sources, Ohm's law, series and parallel circuits. Nodal and mesh analysis of DC circuits. Superposition theorem, Thevenin and Norton Equivalents. Use of operational amplifiers. Transient analysis of simple RC, RL and RLC circuits. Steady state analysis: Phasors and impedances, power and power factor. Single and three phase circuits. Magnetic circuits and transformers. Power generation and distribution. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 15 hours total.

ELEC 311 Electronics I (4 credits)

Prerequisite: ELEC 273 or ENGR 273. Diodes: the ideal diode; terminal characteristics of junction diodes; analysis of diode circuits; the small signal model and its application; operation in the reverse-breakdown region — Zener diodes; rectifier circuits; limiting and clamping circuits. Bipolar junction transistors: structure and physical operation; DC analysis: biasing considerations: small signal analysis and parameters; hybrid π model, T model; common base, common emitter, common collector configurations. Field-effect transistors: structure and physical operation; DC analysis; biasing considerations; small signal analysis and parameters; hybrid π model, T model; common gate, common source, common collector configurations. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: 30 hours total.

ELEC 312 Electronics II (4 credits)

Prerequisite: ELEC 311, 364. Differential and multi-stage amplifiers: differential pair; differential gain; common-mode gain and common-mode rejection ratio (CMRR) current mirrors. High frequency models: s-domain analysis, transfer functions; hybrid π model at high frequency; common base, common emitter, common drain configurations; common gate, common source, common collector configurations; differential BJT pairs at high frequency; MOS differential pair at high frequency. Feedback: general feedback structure; properties of negative feedback; the four basic feedback configurations: series-shunt, series-series, shunt-series; loop gain and stability problems; effect of feedback on amplifier poles; bode plots and frequency compensation. Power amplifiers: classification and output stages; class A, B, C, and AB amplifiers; biasing the class AB amplifier; variations on the class AB configuration; IC power amplifiers and MOS power transistors. Introduction to filters and oscillators. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 30 hours total.

ELEC 321 Introduction to Semiconductor Materials and Devices (3.5 credits)

Prerequisite: CHEM 205; ENGR 213. Fundamentals underlying optical and electronic devices. The structure and growth of crystals. The energy band model for elemental and compound semiconductors. Electronic and optical properties of semiconductors.

Electroluminescence and photoluminescence. The semiconductor in equilibrium. Carrier transport and non-equilibrium phenomena. Introductions to junctions and devices. The laboratory demonstrates the basic electrical and optical properties of semiconductor materials. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.

ELEC 331 *Fundamentals of Electrical Power Engineering* (3.5 credits)

Prerequisite: ELEC 251, 273. Review of fundamentals of AC circuit analysis. Overview of power systems. Three-phase circuits: balanced three-phase circuits with star and delta connected loads, power measurements. Magnetic circuits. Transformers. Power conversion techniques: single phase AC/DC rectifiers, DC/DC choppers and DC/AC converters. DC machines: Operating principle, separately excited DC motor, torque speed characteristics and control methods using rectifiers and choppers. Induction machines: Theory of three-phase induction machines, equivalent circuit parameters, efficiency, torque speed characteristics and control methods using inverters. Overview of power distribution systems. Safety codes. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.

ELEC 351 *Electromagnetic Waves and Guiding Structures* (3 credits)

Prerequisite: ELEC 251, 365. Maxwell's equations. Differential forms of the laws of electromagnetism. Boundary conditions. Power and energy. Uniform plane waves. Transmission line theory. Rectangular waveguides. Antennas. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 353 *Transmission Lines, Waves and Signal Integrity* (3 credits)

Prerequisite: ELEC 264; ENGR 233. Transmission lines and high-speed logic design. Intersymbol interference and eye patterns. Transmission line circuits in the frequency domain, rise time and bandwidth of digital signals. Maxwell's equations, plane waves, and antennas. Wireless communications and indoor propagation. Lectures: three hours per week. Tutorial: one hour per week.

ELEC 363 *Fundamentals of Telecommunications Systems* (3.5 credits)

Prerequisite: ELEC 364; ENGR 371. Introduction to basic telecommunications concepts and systems. Analog communications: AM and FM, system level consideration of noise-bandwidth tradeoffs. Digital communications: sampling and quantization, digital modulation techniques, the matched filter. Redundancy encoding. Lectures: three hours per week. Laboratory: 15 hours total.
NOTE: Students who have received credit for ELEC 461 may not take this course for credit.

ELEC 364 *Signals and Systems II* (3.5 credits)

Prerequisite: ELEC 264. Sampling of continuous-time and discrete-time signals. Reconstruction of a signal from its samples using interpolation. Sampling of Discrete-time signals. Discrete-time decimation and interpolation. Laplace Transform. Inverse Laplace Transform. Analysis of systems using Laplace Transform. Unilateral Laplace Transform. The Z-Transform and inverse Z-Transform. Analysis of systems using Z-Transform. Magnitude/phase frequency responses and group delay. Bode plots for rational transfer functions. Unilateral Z-Transform. Amplitude modulation and demodulation. Pulse-amplitude modulation. Frequency modulation. Computer-based MATLAB simulation. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.
NOTE: Students who have received credit for ELEC 361 may not take this course for credit.

ELEC 365 *Complex Variables and Partial Differential Equations* (3 credits)

Prerequisite: ENGR 213, 233. Review of complex arithmetic. Analytic functions. Taylor and Laurent series. Residue theory. Fourier series. Partial differential equations. Applications to Laplace, heat, and wave equations. Bessel and Legendre functions. Lectures: three hours per week. Tutorial: one hour per week.
NOTE: Students who have received credit for ELEC 261 or 362 may not take this course for credit.

ELEC 370 *Modelling and Analysis of Physical Systems* (3.5 credits)

Prerequisite: ELEC 364 previously or concurrently. Definition and classification of physical systems. Definition of through and across variables. Modelling of system components: electrical, mechanical, fluid, and thermal. Limits of linear models and linear representations of nonlinear components. Modelling of systems including mixed systems. Analysis techniques: review of first and second order systems; mesh and nodal analysis in the Laplace transform domain; impedance and transfer functions; two-port parameters; indefinite admittance matrix; signal flow graphs; identification of analysis techniques used for SPICE. Fundamentals of frequency response: introduction to filters; Butterworth and Chebyshev filter functions. Introduction to state variable analysis. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.
NOTE: Students who have received credit for ENGR 370 or MECH 370 may not take this course for credit.

ELEC 372 *Fundamentals of Control Systems* (3.5 credits)

Prerequisite: ELEC 370. Mathematical models of control systems. Characteristics, performance, and stability of linear feedback control systems. Root-locus methods. Frequency response methods. Stability in the frequency domain. Design and compensation of feedback control systems. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: 15 hours total.
NOTE: Students who have received credit for ENGR 372 or MECH 371 may not take this course for credit.

ELEC 390 *Electrical Engineering Team Design Project* (3 credits)

Prerequisite: Minimum of 45 credits in BEng (Electrical); COEN 244; ELEC 311; ENCS 282; ENGR 301. The Team Design Project introduces students to teamwork, project management, engineering design for a complex problem, technical writing and technical presentation in a team environment. Students will be assigned to teams and each team will design and build a device defined by the Department. Students will present their design and demonstrate that their device works in a competition at the end of the term. Tutorial: two hours per week. Equivalent laboratory time: six hours per week.
NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

ELEC 415 (also listed as MECH 480)**Flight Control Systems (3.5 credits)**

Prerequisite: ELEC 372. Basic flight control and flight dynamics principles. Aircraft dynamic equations and performance data. Implementation of aircraft control: control surfaces and their operations, development of thrust and its control; autopilot systems, their algorithms, dynamics and interaction problems. Flight instruments, principles of operation and dynamics. Cockpit layouts — basic configuration, ergonomic design, control field forces; advanced concepts in instruments, avionics and displays; HUD; flight management systems, and communication equipment. Introduction to flight simulation: overview of visual, audio and motion simulator systems; advanced concepts in flight simulators. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 480 may not take this course for credit.

ELEC 416 (also listed as MECH 482)**Avionic Navigation Systems (3 credits)**

Prerequisite: ELEC 370; ENGR 371. Basics of modern electronic navigation systems, history of air navigation, earth coordinate and mapping systems; basic theory and analysis of modern electronic navigation instrumentation, communication and radar systems, approach aids, airborne systems, transmitters and antenna coverage; noise and losses, target detection, digital processing, display systems and technology; demonstration of avionic systems using flight simulator. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for MECH 482 may not take this course for credit.

ELEC 421 Solid State Devices (3.5 credits)

Prerequisite: ELEC 321. Junction theory (PN junctions, Schottky and ohmic contacts, hetero-junctions). Diodes and bipolar transistors. Light-emitting diodes, photodetectors, solar cells, and fibre optics. Lasers: operating principles and applications in optoelectronic devices. Planar silicon junctions and transistors will be designed, fabricated and evaluated in the laboratory, including resistivity measurements, semiconductor cleaning, oxidation, diffusion, photolithography, etching, metallization, and comparison of design with experimental results. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 422 Design of Integrated Circuit Components (3.5 credits)

Prerequisite: ELEC 421. Structures, characteristics and design of MOS capacitors and MOSFETs. Structures, characteristics and design of laser diodes. Optoelectronic devices and integrated circuits. Planar MOS devices, including capacitors and MOSFETs will be designed, fabricated, and evaluated in the laboratory. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 423 Introduction to Analog VLSI (4 credits)

Prerequisite: ELEC 311. CMOS transistor layout considerations, design rules, circuit extraction. MOSFET modelling, I-V equations, AC equivalent circuits for high-frequency operation, computer-based simulation. Analysis and design of small-scale integrated circuit building blocks including MOS switch, active resistor, current source, current mirror, voltage amplifiers, voltage-reference circuits, multipliers. Analysis and design of medium-scale integrated circuit building blocks including op-amps, fully-differential op-amp and common mode feedback circuits, transconductance amplifiers, transimpedance amplifiers, comparators. Noise analysis. Mismatch analysis and modelling, offset removal techniques. Analog VLSI system examples. Lectures: three hours per week. Laboratory: 30 hours total.

ELEC 424 VLSI Process Technology (3.5 credits)

Prerequisite: ELEC 311, 321. Introduction to basic VLSI technologies; crystal growth, thermal oxidation, diffusion, ion implantation, chemical vapour deposition, wet and dry etching, and lithography. Layout, yield, and VLSI process integration. The lab demonstrates a semiconductor device fabrication process. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 425 Optical Devices for High-Speed Communications (3.5 credits)

Prerequisite: ELEC 321, 351. Optical properties of semiconductors. Fundamental principles for understanding and applying optical fibre technology. Fundamental behaviour of the individual optical components and their interactions with other devices. Lasers, LEDs, optical fibres, light detectors, optical switches. Concepts of WDM and DWDM. Components required for WDM and DWDM. A comprehensive treatment of the underlying physics: noise and distortion in optical communications, light polarization, modulation and attenuation. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 430 Electrical Power Equipment (3.5 credits)

Prerequisite: ELEC 331. Components of a transmission system. Transmission line; modelling and parameters. Transformers: equivalent circuits, losses, connections and protection. Breakers: operation and design. Compensation equipment: capacitors, inductors, series and shunt connections. Insulation coordination. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: This course is usually offered in the French language.

ELEC 431 Electrical Power Systems (3.5 credits)

Prerequisite: ELEC 331. Inductance, capacitance, resistance of polyphase transmission lines; current and voltage relations of transmission lines; load flow studies; symmetrical and unsymmetrical faults; power system stability. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 432 Control of Electrical Power Conversion Systems (3.5 credits)

Prerequisite: ELEC 372 or ENGR 372; ELEC 331. Basic considerations and control requirements. Control system principles and structures. Controller characteristics and operation. Static power conversion systems. Electromechanical systems and electrical

machine modelling. Control system design. Applications to electric motor drives and typical power conversion systems. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: This course is usually offered in the French language.

ELEC 433 Power Electronics (3.5 credits)

Prerequisite: ELEC 311, 331. Review of basic electrical concepts. Power electronic systems. Power semiconductor switches. AC controllers. Line frequency AC-DC converters: diodes and thyristor circuits. DC-DC converters. DC-AC converters. Utility applications: STATCOM and power electronic interfaces. Industrial and utility applications. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 434 Behaviour of Power Systems (3.5 credits)

Prerequisite: ELEC 331. Introduction: classification of phenomena, structure of power systems. Review of component models: lines, transformers, electrical machines and load. Excitation systems of machines. Steady-state operation. Transient stability, voltage stability and small signal stability. Compensation methods: stabilizer, series and shunt compensators. Sub-synchronous resonances. Transient electromagnetic phenomena. Methods and tools for numerical simulation. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: This course is usually offered in the French language.

ELEC 435 Electromechanical Energy Conversion Systems (3.5 credits)

Prerequisite: ELEC 331. Lumped parameter concepts of electromechanics. Energy, co-energy in the derivation of torques and forces. Examples of electric machines: dc, synchronous and induction types. Steady-state, transient and stability analysis. Power electronic controllers. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 436 Protection of Power Systems (3.5 credits)

Prerequisite: ELEC 331. General aspects of protection systems. Measurement transformers. Grounding. Overcurrent and ground fault protection. Protection of transformers, shunt capacitors and buses. Protection of transmission lines. Telecommunication for protection and automation systems. Protection of inverters. Protection of distribution networks. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: This course is usually offered in the French language.

ELEC 437 Renewable Energy Systems (3 credits)

Prerequisite: COEN or ELEC 390 or equivalent. Electrical basics and models of solar energy (photo-voltaics), electrical power from wind energy, electrical power from water, including wave energy, tidal energy, micro-hydro. Case studies, for example the application of solar PV to street lighting. Electrical engineering design implications. Design assignments. Lectures: three hours per week.

NOTE: Students who have received credit for this topic under an ELEC 498 number may not take this course for credit.

ELEC 438 Industrial Electrical Systems (3.5 credits)

Prerequisite: ELEC 331. Structures of industrial power systems. Voltage levels. Electric installations, codes and standards. Short-circuits, protection and coordination. Grounding. Power quality. Power factor, tariffs and energy management. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: This course is usually offered in the French language.

ELEC 439 Hybrid Electric Vehicle Power System Design and Control (3 credits)

Prerequisite: ELEC 331. Introduction to Electric Vehicles (EV), Hybrid Electric Vehicles (HEV). Vehicle design fundamentals. Traction motors for EV/HEV propulsion. On-board energy sources and storage devices: high-voltage traction batteries, fuel cells, ultra-capacitors, flywheels. Power electronic converters and control. Various EV/HEV/Fuel Cell Vehicle topologies and modelling. Energy management strategies. Practical design considerations. Engineering impact of electric, hybrid electric, and fuel cell vehicles. Lectures: three hours per week.

ELEC 440 Controlled Electric Drives (3.5 credits)

Prerequisite: ELEC 331. Elements of a drive system, characteristics of common mechanical systems, drive characteristics, operation in one, two, or four quadrants. Fully controlled rectifier drives, braking of DC motors, control of DC motors using DC/DC converters. Control of polyphase induction motors, voltage-source and current-source inverter drives, frequency-controlled induction motor drives, introduction to vector control of induction motor drives, field oriented control, sensor-less operation. Control of synchronous motors, permanent magnet motors. Switched reluctance motor drives, stepper motors. Brushless DC motor drives, low-power electronic motor drives. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: Students who have received credit for this topic under an ELEC 498 number may not take this course for credit.

ELEC 441 Modern Analog Filter Design (3.5 credits)

Prerequisite: ELEC 370. Review of network analysis. Magnitude and frequency scaling. Magnitude and phase approximation in synthesis of filter functions. Second-order active RC filters. Synthesis of all-pole LC ladder filters. Second-order switched-capacitor filters. Realization of high-order active filters. Current mode filters. Switched-current filters. Integrated circuit filters. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 442 Digital Signal Processing (3.5 credits)

Prerequisite: ELEC 364; ENGR 371. Review of Z-transform; linear phase and non-linear phase systems; all-pass and minimum phase systems, recursive and non-recursive digital filters; common digital filter structures, common design approaches for digital

filters; description of typical Digital Signal Processor chips; Review of sampling, reconstruction, interpolation and decimation; changing the sampling rate by integer and non-integer factor; multirate signal processing, polyphase decomposition, multirate filter banks; digital processing of analog signals, A/D and D/A converters; discrete Fourier transform; random signals, Least-Mean-Square (LMS) filters. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 453 *Microwave Engineering* (3.5 credits)

Prerequisite: ELEC 370 or ENGR 370; ELEC 351. Properties of waveguides, striplines, and microstrips. Scattering parameters. Butterworth and Chebyshev impedance transformers. Microwave couplers, cavities, and Fabry-Perot resonators. Periodic structures. Microwave filter design. Faraday rotation and non-reciprocal devices. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 455 *Acoustics* (3 credits)

Prerequisite: ELEC 351. Sound generation and propagation in elastic media; conversion between acoustical, electrical, and mechanical energy. Lumped-parameter approximations, sound in rooms, underwater acoustics, microphones; loudspeakers and audio communications problems; noise and vibration control problems. Lectures: three hours per week.

ELEC 456 *Antennas* (3.5 credits)

Prerequisite: ELEC 351. Antenna fundamentals and definitions. Radiation integrals. Dipoles and loops. Arrays. Antenna self and mutual impedance. Matching techniques. Travelling wave antennas. Broadband antennas. Equivalence principle. Aperture antennas. Antenna measurement techniques. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 457 *Design of Wireless RF Systems* (3 credits)

Prerequisite: ELEC 453. Introduction to wireless systems. Noise and distortion in microwave systems. Antennas and propagation. Amplifiers. Mixers. Transistor oscillators and frequency synthesizers. Modulation techniques. Receiver design. Use of RF CAD tools. Lectures: three hours per week.

ELEC 458 *Techniques in Electromagnetic Compatibility* (3 credits)

Prerequisite: ELEC 351 or 353. Introduction to EMC procedures, control plans, and specifications. Radiated and conducted susceptibility and emission testing. Introduction to EMC antennas, antenna concepts, electric and magnetic dipoles, biconical dipoles, conical log spiral antennas, setting up fields for susceptibility testing, measuring radiation from equipment. Coupled transmission lines, pulse propagation, closely spaced parallel transmission lines, capacitive coupling, inductive coupling, shielding against magnetic fields. Shielding and enclosures, electric and magnetic field screening mechanisms, shielding effectiveness, grounding considerations. EMC test facilities, screened rooms, TEM cells, signals and spectra, intermodulation, cross-modulation, the spectrum analyzer. Noise and pseudo-random noise, noise performance of measurement/receiving systems, noise equivalent bandwidth, noise figure, antenna noise temperature and S/N ratio. Lectures: three hours per week.

ELEC 462 *Introduction to Digital Communications* (3.5 credits)

Prerequisite: ELEC 363. Noise in communication systems, additive white Gaussian noise; modulation, demodulation and detection; maximum likelihood receiver, matched filter, error probability; intersymbol interference, pulse shaping filter; bandpass modulation and demodulation techniques such as PAM, PSK, DPSK, FSK, QAM; error control coding, linear block codes, cyclic codes, convolutional codes, Viterbi decoder; coding in system design considerations, bit error rates and coding gain, trade-offs in power, bandwidth, data rate and system reliability; codulation. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 463 *Telecommunication Networks* (3 credits)

Prerequisite: ELEC 363. Communication networks and services; introduction to layered network architectures; transmission systems and the telephone network: multiplexing, circuit switches, routing and signalling; peer-to-peer protocols: ARQ protocols, data-link controls, packet multiplexing; multiple access communications: Aloha, CSMA, reservation schemes, polling, token-passing ring, LAN standards, LAN bridges; packet-switching networks: datagrams and virtual circuits; TCP/IP architecture: Internet protocol, transmission control protocol. Lectures: three hours per week.

NOTE: Students who have received credit for COEN 445 may not take this course for credit.

ELEC 464 *Wireless Communications* (3 credits)

Prerequisite: ELEC 462. Review of modulation and error control coding. Modulation vs. coding trade-off, communications link analysis. Introduction to cellular systems: frequency reuse, trunking and grade of services, sectoring and cell splitting, coverage and capacity. Modulation techniques for mobile communications. Mobile radio channels. Spread-spectrum techniques. Multiplexing and multiple access techniques. Wireless and cordless standards. Lectures: three hours per week.

ELEC 465 *Networks Security and Management* (3.5 credits)

Prerequisite: COEN 445 or ELEC 463. Network security threats. Importance of security policy. Principles and techniques of encryption and authentication. Network security protocols: X509, IPSEC (Internet Protocol Security Architecture). Network management: issues, architectures, and protocols. Fault management, configuration management, security management, performance management, and accounting management. Management Information Bases (MIBs). SNMP and its evolution. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 466 *Introduction to Optical Communication Systems* (3.5 credits)

Prerequisite: ELEC 351, 363. Overview of optical fibres and optical fibre communications. Signal propagation in optical fibres: attenuation, chromatic dispersion, mode coupling, and nonlinearities. Optical transmitters' characteristics and requirements for

optical networks. Power launching and coupling: optical transmitter-to-fibre coupling, fibre-to-fibre joints, and optical fibre connectors. Optical receivers: basic structures, noise analysis, characteristics and requirements for optical networks. Digital/analog transmissions: link power budget, rise-time budget, line coding, error correction, and noise effects on transmissions. WDM concepts: operation principle of WDM. Optical amplifiers: characteristics and requirements for optical networks, amplifier noise, system applications, and wavelength conversion. Optical networks: basic topologies, SONET/SDH, broadcast-and-select WDM networks, wavelength-routed networks. Optical measurements: test equipments, attenuation/dispersion measurements, OTDR, eye pattern and OSA. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 472 *Advanced Telecommunication Networks* (3.5 credits)

Prerequisite: ELEC 463 or COEN 445. Routing in packet networks, shortest-path algorithms, Internet routing protocols, ATM networks: ATM and ATM adaptation layers, traffic management and QoS, congestion control, ATM signalling, advanced network architectures: classical IP over ATM, MPLS, integrated and differentiated services, mobile communications: wireless transmission, medium access control, GSM system, mobile IP, mobile transport layer and support for mobility. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 481 *Linear Systems* (3.5 credits)

Prerequisite: ELEC 372 or MECH 371 or ENGR 372. Review of matrix algebra. State-space description of dynamic systems: linearity, causality, time-invariance, linearization. Solution of state-space equations. Transfer function representation. Discrete-time models. Controllability and observability. Canonical forms and minimal-order realizations. Stability. Stabilizability and pole placement. Linear quadratic optimal control. Observer design. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: Students who have received credit for ENGR 471 may not take this course for credit.

ELEC 482 *System Optimization* (3.5 credits)

Prerequisite: ENGR 391 or EMAT 391. Linear least squares. Properties of quadratic functions with applications to steepest descent method, Newton's method and Quasi-Newton methods for nonlinear optimization. One-dimensional optimization. Introduction to constrained optimization, including the elements of Kuhn-Tucker conditions for optimality. Least p^{th} and mini-max optimization. Application of optimization techniques to engineering problems. Lectures: three hours per week. Laboratory: 15 hours total.

NOTE: Students who have received credit for ENGR 472 may not take this course for credit.

ELEC 483 *Real-Time Computer Control Systems* (3.5 credits)

Prerequisite: ELEC 372 or ENGR 372. Introduction to real-time computer control systems; a review of discrete-time signals and systems, difference equations, z-transform; sampled-data systems, sample and hold, discrete models; discrete equivalents of continuous-time systems; stability analysis; design specifications; design using root locus and frequency response methods; implementation issues including bumpless transfer, integral windup, sample rate selection, pre-filtering, quantization effects and computational delay; scheduling theory and priority assignment to control processes, timing of control loops, effects of missed deadlines; principles and characteristics of sensors and devices, embedded processors, processor/device interface. Lectures: three hours per week. Laboratory: 15 hours total.

ELEC 490 *Capstone Electrical Engineering Design Project* (4 credits)

Prerequisite: Minimum of 75 credits in BEng (Electrical) or permission of the Department; ENGR 371; COEN 311; ELEC 364, 390. Students are assigned to groups, and work together under faculty supervision to solve a complex interdisciplinary design problem — typically involving communications, control systems, electromagnetics, power electronics, software design, and/or hardware design. The project fosters teamwork between group members and allows students to develop their project management, technical writing, and technical presentation skills. Tutorial: one hour per week, two terms. Equivalent laboratory time: four hours per week, two terms.

NOTE: All written documentation must follow the Concordia Form and Style guide. Students are responsible for obtaining this document before beginning the project.

ELEC 498 *Topics in Electrical Engineering* (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Electrical and Computer Engineering Department. The course content may vary from offering to offering and will be chosen to complement elective courses available in a given year.

CONCORDIA INSTITUTE FOR AEROSPACE DESIGN AND INNOVATION

IADI 301 *Undergraduate Aerospace Industry Project I* (0 credit)

Prerequisite: Acceptance into CIADI. The activities associated with this course include participation in regular meetings at the Institute and with faculty and industry members, attendance at training sessions (as applicable), industry training and tours. A project is assigned to the students. Students are also required to prepare and present progress reports on their project. A final report of their project must be submitted to the director of CIADI. A grade of pass with distinction, pass, or fail will be awarded based on the evaluation of the above activities. All students accepted to CIADI are required to register for this non-credit course activity.

IADI 401 *Undergraduate Aerospace Industry Project II* (0 credit)

Prerequisite: Pass with distinction in IADI 301. The activities associated with this course deal with participation in regular meetings at the Institute and with faculty and industry members, attendance at training sessions (as applicable), industry training and tours.

A project is assigned to the students. Students are also required to prepare and present progress reports on their project. A final report of their project must be submitted to the director of CIADI. A grade of pass with distinction, pass, or fail will be awarded based on the evaluation of the above activities. Students wishing to use their research and design project for their capstone project (e.g. MECH 490, COEN 490) must receive written approval from the Capstone Design Project coordinator in their respective department at the commencement of their CIADI project, and meet all requirements set out by both CIADI and their individual department.

INDUSTRIAL ENGINEERING

INDU 211 *Introduction to Production and Manufacturing Systems* (3 credits)

History of industrial engineering. Role of industrial engineers. Types of manufacturing and production systems. Material flow systems. Job design and work measurement. Introduction to solution methodologies for problems which relate to the design and operation of integrated production systems of humans, machines, information, and materials. Lectures: three hours per week. Tutorial: one hour per week.

INDU 311 *Simulation of Industrial Systems* (3.5 credits)

Prerequisite: ENGR 371. Modelling techniques in simulation; application of discrete simulation techniques to model industrial systems; random number generation and testing; design of simulation experiments using different simulation languages; output data analysis. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks. Tutorial: one hour per week.

INDU 320 *Production Engineering* (3 credits)

Prerequisite: INDU 323. The systems approach to production. Interrelationships among the component blocks of the system: forecasting, aggregate planning, production, material and capacity planning, operations scheduling. An overview of integrated production planning and control including MRP II, Just in Time manufacturing (JIT). Lectures: three hours per week. Tutorial: one hour per week.

INDU 321 *Lean Manufacturing* (3 credits)

Prerequisite: INDU 320. Lean fundamentals; lean manufacturing; lean engineering; lean principles, tools and techniques, practices, and implementation; five S's, process analysis/spaghetti charts, value engineering; value stream mapping; standardized work/standard times; set-up reduction/line balancing; unit manufacturing; cell layout/cellular manufacturing; total productive maintenance; kanban; lean supply chain management; transition-to-lean roadmap; people/organizational issues in the lean enterprise; Six Sigma; TOM; agile manufacturing. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for INDU 420 may not take this course for credit.

INDU 323 *Operations Research I* (3 credits)

Prerequisite: ENGR 213, 233. An introduction to deterministic mathematical models with emphasis on linear programming. Applications to production, logistics, and service systems. Computer solution of optimization problems. Lectures: three hours per week. Tutorial: one hour per week.

INDU 324 *Operations Research II* (3 credits)

Prerequisite: INDU 323. Integer programming (IP), including modelling and enumerative algorithms for solving IP problems; post-optimality analysis. Network flows, dynamic programming and non-linear programming. Applications in the design and operation of industrial systems. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for INDU 430 may not take this course for credit.

INDU 330 *Engineering Management* (3 credits)

Organizational structures, their growth and change. Motivation, leadership, and group behaviour. Design of alternatives for improving organizational performance and effectiveness. Planning, organization and management of engineering projects. Management for total quality. Lectures: three hours per week.

INDU 371 *Stochastic Models in Industrial Engineering* (3 credits)

Prerequisite: ENGR 371. Overview of probability theory; probability distributions; exponential model and Poisson process; discrete-time and continuous-time Markov chains; classification of states; birth and death processes; queuing theory. Application to industrial engineering problems. Lectures: three hours per week. Tutorial: one hour per week.

INDU 372 *Quality Control and Reliability* (3 credits)

Prerequisite: ENGR 371. Importance of quality; total quality management; statistical concepts relevant to process control; control charts for variables and attributes; sampling plans. Introduction to reliability models and acceptance testing; issues of standardization. Lectures: three hours per week. Tutorial: one hour per week.

INDU 410 *Safety Engineering* (3.5 credits)

Prerequisite: MECH 311. Engineering design for the control of workplace hazards. Occupational injuries and diseases. Codes and standards. Workplace Hazardous Materials Information Systems (WHMIS). Hazard evaluation and control. Design criteria. Risk assessment. Safety in the manufacturing environment. Applications in ventilation, air cleaning, noise and vibration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 411 Computer Integrated Manufacturing (3.5 credits)

Prerequisite: MECH 311. Concepts and benefits of computer integrated manufacturing (CIM). Design for manufacturing. Computer-aided design, process planning, manufacturing (computer numerical control parts programming), and inspection. Robots in CIM. Production planning and scheduling in CIM. System integration. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 412 Human Factors Engineering (3.5 credits)

Prerequisite: ENGR 371. Elements of anatomy, physiology, and psychology; engineering anthropometry; human capacities and limitations; manual material handling; design of workplaces; human-machines system design; design of controls and displays; shift work. Applications to a manufacturing environment. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

INDU 421 Facilities Design and Material Handling Systems (3.5 credits)

Prerequisite: INDU 311, 320. An introduction to planning and design of production and manufacturing. Facility layout and location. Material handling systems and equipment specifications. Computer-aided facilities planning. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

INDU 423 Inventory Control (3.5 credits)

Prerequisite: INDU 320. Inventory analysis and control systems; the role of forecasting in controlling inventories; the role of inventories in physical distribution; supply chain management; work in process inventories; inventory in just-in-time manufacturing systems. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

INDU 440 Product Design and Development (3 credits)

Prerequisite: MECH 311. Development processes and organizations, product planning, identifying customer needs, product specifications, concept generation, concept selection, concept testing, product architecture, industrial design, design for manufacturing, prototyping robust design, patents and intellectual property. Lectures: three hours per week.

INDU 441 Introduction to Six Sigma (3 credits)

Prerequisite: INDU 372. Overview of the Six Sigma concepts and tools. Six Sigma deployment practices: Define, Measure, Analyze, Improve and Control phases (DMAIC). Project development, and the DMAIC problem-solving approach. Project. Lectures: three hours per week.

INDU 442 Logistics Network Models (3 credits)

Prerequisite: INDU 324. Overview of transportation systems; airlines, railways, ocean liners, cargo, energy transportation and pipelines. Supply chain characterization. Site location. Distribution planning. Vehicle routing. Fleet scheduling. Crew scheduling. Demand management. Replenishment management. Revenue management. Geographic information systems. Real-time network control issues. Project. Lectures: three hours per week.

INDU 466 Decision Models in Service Sector (3 credits)

Prerequisite: ENGR 371; INDU 320. Introduction to service strategy and operations. Service demand forecasting and development of new services. Service facility location and layout planning. Applications of decision models in service operations and service quality control. Cost analysis, queuing models, risk management and resource allocation models for service decisions. Service outsourcing and supply chain issues. Efficiency and effectiveness issues in different service sectors such as emergency force deployment, municipal resource allocation and health care. Case studies using operations research, operations management, and statistical techniques. Lectures: three hours per week.

INDU 475 Advanced Concepts in Quality Improvement (3 credits)

Prerequisite: INDU 372. Statistical experimental design issues such as randomized blocks, factorial designs at two levels, applications on factorial designs, building models, Taguchi methods. Lectures: three hours per week.

INDU 490 Capstone Industrial Engineering Design Project (4 credits)

Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; INDU 421 previously or concurrently. A supervised design, simulation or experimental capstone project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and individual oral presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member.

INDU 498 Topics in Industrial Engineering (3 credits)

Prerequisite: Permission of the Department Chair. This course may be offered in a given year upon the authorization of the Mechanical and Industrial Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in the Industrial Engineering program. Lectures: three hours per week.

MECHANICAL ENGINEERING

MECH 211 Mechanical Engineering Drawing (3.5 credits)

Introduction to graphic language and design — means and techniques. The third and the first angle projections. Orthographic projection of points, lines, planes and solids. Principal and auxiliary views. Views in a given direction. Sectional views. Intersection of lines, planes and solids. Development of surfaces. Drafting practices. Dimensioning, fits and tolerancing. Computer-aided

drawing and solid modelling. Working drawings — detail and assembly drawing. Design practice. Machine elements representation. Lectures: three hours per week. Tutorial: two hours per week — includes learning of a CAD software. Laboratory: two hours per week, alternate weeks.

MECH 215 *Programming for Mechanical and Industrial Engineers* (3.5 credits)

Prerequisite: MATH 204 (Cegep mathematics 105). Writing programs using assignment and sequences. Variables and types. Operators and expressions. Conditional and repetitive statements. Input and output. File access. Functions. Program structure and organization. Pointers and dynamic memory allocation. Introduction to classes and objects. Mechanical and industrial engineering applications. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: one hour per week.

MECH 221 *Materials Science* (3 credits)

Prerequisite: CHEM 205 (Cegep Chemistry 101). Relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures, crystalline imperfections and mechanisms of structural change. Microstructures and their development from phase diagrams. Structures and mechanical properties of polymers and ceramics. Thermal, optical, and magnetic properties of materials. Lectures: three hours per week. Tutorial: one hour per week.

MECH 311 *Manufacturing Processes* (3.75 credits)

Prerequisite: MECH 313; ENGR 244 previously or concurrently. Fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, safety and health considerations, forming, conventional machining and casting processes, welding and joining, plastic production, and non-conventional machining techniques. Sustainable technologies. Laboratory includes instruction and practice on conventional machine tools and a manufacturing project. Lectures: three hours per week. Tutorial: two hours per week, including industrial visits and field trips to local industries. Laboratory: three hours per week, alternate weeks.

MECH 313 *Machine Drawing and Design* (3 credits)

Prerequisite: MECH 211. Introduction to engineering design and design process. Problem definition, solution formulation, model development and collaboration aspects of design process. The use of drawings and other graphical methods in the process of engineering design. Industrial standards and specifications, design of fits, linear and geometrical tolerances. Design projects based on design philosophies will involve design and selection of many standard machine components like mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs, and bearings. Drawing representation of standard components. Design projects are an integral part of this course. Lectures: three hours per week. Tutorial: two hours per week.

MECH 321 *Properties and Failure of Materials* (3.5 credits)

Prerequisite: MECH 221. The service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; tensile and torsion tests; elements of dislocation theory; strengthening mechanisms; composite materials. Modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage. Failure analysis. Material codes; material selection for design. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 343 *Theory of Machines* (3.5 credits)

Prerequisite: ENGR 213, 233, 243. Introduction to mechanisms; position and displacement; velocity; acceleration; synthesis of linkage; robotics; static force analysis; dynamic force analysis; forward kinematics and inverse kinematics; introduction to gear analysis and gear box design; kinematic analysis of spatial mechanisms. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 344 *Machine Element Design* (3 credits)

Prerequisite: ENGR 244; MECH 313; MECH 321, 343 previously or concurrently. Introduction to machine design; static failure theories; failure of ductile vs. brittle materials under static loading. Fatigue failure theories; fatigue loads; notches and stress concentrations; residual stresses; designing for high cycle fatigue. Design of shafts, keys and couplings. Design of spur gears. Spring design. Design of screws and fasteners. Design of bearings. Case studies. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for MECH 441 may not take this course for credit.

MECH 351 *Thermodynamics II* (3.5 credits)

Prerequisite: ENGR 251. Brief review of ideal gas processes. Semi-perfect gases and the gas tables. Mixtures of gases, gases and vapours, air conditioning processes. Combustion and combustion equilibrium. Applications of thermodynamics to power production and utilization systems: study of basic and advanced cycles for gas compression, internal combustion engines, power from steam, gas turbine cycles, and refrigeration. Real gases. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 352 *Heat Transfer I* (3.5 credits)

Prerequisite: ENGR 311, 361. Analytical and numerical methods for steady-state and transient heat conduction. Empirical and practical relations for forced- and free-convection heat transfer. Radiation heat exchange between black bodies, and between non-black bodies. Gas radiation. Solar radiation. Effect of radiation on temperature measurement. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 361 *Fluid Mechanics II* (3.5 credits)

Prerequisite: ENGR 361. Differential analysis of fluid flows, vorticity, stream function, stresses, and strains. Navier-Stokes equations and solutions for parallel flows. Euler's equations, irrotational and potential flows, plane potential flows. Viscous flows in pipes,

laminar and turbulent flows, major and minor losses. Flow over immersed bodies, boundary layers, separation and thickness. Drag, lift and applications. Introduction to compressible flows, speed of sound, Mach cone, and some characteristics of supersonic flows. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 368 *Electronics for Mechanical Engineers* (3.5 credits)

Prerequisite: PHYS 205; ENGR 311 previously or concurrently. Dependent sources, voltage and current dividers, voltage and current sources, superposition, Thevenin and Norton equivalent sources, linear and nonlinear circuit analysis. Semiconductors and diodes. Bipolar Junction Transistors (BJT), Field Effect Transistors (FET); amplifiers and switches. Operational amplifiers; circuits and frequency response. Digital logic components and circuits. Digital systems. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 470 may not take this course for credit.

NOTE: Electrical Engineering and Computer Engineering students may not take this course for credit.

MECH 370 *Modelling, Simulation and Control Systems* (3.5 credits)

Prerequisite: PHYS 205; ENGR 213; ENGR 311 previously or concurrently; ENGR 245 or 243. Definition and classification of dynamic systems and components. Modelling of system components: mechanical, electromechanical, and electro-hydraulic systems. Nonlinear systems and linear representations of nonlinear components. Time domain analysis. Transfer function models. Transient and steady-state characteristics of dynamic systems. State variable models. Block diagrams and signalflow graphs. Characteristics and performance of linear feedback control systems. System stability. Simulation techniques using Matlab/Simulink. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for ELEC 370 may not take this course for credit.

MECH 371 *Analysis and Design of Control Systems* (3.75 credits)

Prerequisite: ENGR 311; MECH 370. Stability of linear feedback systems. Root-Locus method. Frequency response concepts. Stability in the frequency domain. Feedback system design using Root Locus techniques. Compensator concepts and configurations. PID-controller design. Simulation and computer-aided controller design using Matlab/Simulink. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: three hours per week, alternate weeks.

NOTE: Students who have received credit for ELEC 372 may not take this course for credit.

MECH 375 *Mechanical Vibrations* (3.5 credits)

Prerequisite: ENGR 311; ELEC 370 or MECH 370. Transient vibrations under impulsive shock and arbitrary excitation: normal modes, free and forced vibration. Multi-degree of freedom systems, influence coefficients, orthogonality principle, numerical methods. Continuous systems; longitudinal torsional and flexural free and forced vibrations of prismatic bars. Lagrange's equations. Vibration measurements. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 443 may not take this course for credit.

MECH 390 *Mechanical Engineering Design Project* (3 credits)

Prerequisite: MECH 311, 343; MECH 344 previously or concurrently. The design process; product cost, quality and time to market, open and concept design problems, problem description. Geometric and type synthesis. Direct and inverse design problems. Material selection and load determination. Mathematical modelling, analysis, and validation. Introduction to Computer-Aided Design and Engineering (CAD and CAE). Product evaluation for performance, tolerance, cost, manufacture, assembly, and other measures. Design documentation. A team-based design project is an intrinsic part of this course. Lectures: three hours per week. Tutorial: two hours per week.

MECH 411 *Instrumentation and Measurements* (3.5 credits)

Prerequisite: ENGR 311; MECH 370. Unified treatment of measurement of physical quantities; static and dynamic characteristics of instruments — calibration, linearity, precision, accuracy, and bias and sensitivity drift; sources of errors; error analysis; experiment planning; data analysis techniques; principles of transducers; signal generation, acquisition and processing; principles and designs of systems for measurement of position, velocity, acceleration, pressure, force, stress, temperature, flow-rate, proximity detection. The course includes demonstration of various instruments. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for MECH 373 may not take this course for credit.

MECH 412 *Computer-Aided Mechanical Design* (3.5 credits)

Prerequisite: MECH 313. Introduction to computational tools in the design process. Introduction to the fundamental approaches to computer-aided geometric modelling, physical modelling and engineering simulations. Establishing functions and functional specifications with emphasis on geometric tolerancing and dimensioning, manufacturing and assembly evaluation. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 414 *Computer Numerically Controlled Machining* (3.5 credits)

Prerequisite: MECH 311, 412. Computer aided design and manufacturing (CAD/CAM) hardware and software. Essentials of Computer Numerical Control (CNC) machine tools and systems. Process planning and tooling systems for CNC machining. Theory of CNC programming of sculptured parts. Multi-axis CNC tool path generation. Project using CAD/CAM software; CATIA for complex mechanical parts design and a CNC machine tool to manufacture parts. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 415 *Advanced Programming for Mechanical and Industrial Engineers* (3 credits)

Prerequisite: MECH 215. Class definitions. Designing classes and member functions. Constructors and destructors. Class libraries and their uses. Input and output. Data abstraction and encapsulation. Introduction to software engineering. Computer graphics and visualization. Numerical methods. Advanced mechanical and industrial engineering applications. This course includes a substantial project. Lectures: three hours per week. Tutorial: one hour per week.

MECH 421 *Mechanical Shaping of Metals and Plastics* (3.5 credits)

Prerequisite: MECH 221. Metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits. Metal cutting, machinability, tooling. Plastics shaping: extrusion, moulding, vacuum forming. Consideration of the mechanical parameters critical for process control and computer applications. Interaction of materials characteristics with processing to define product properties: cold working, annealing, hot working, super plasticity, thermomechanical treatment. Energy conservation, safety, product quality, and liability. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 422 *Mechanical Behaviour of Polymer Composite Materials* (3 credits)

Prerequisite: ENGR 233, 244; MECH 221. General applications of polymer composite materials in aircraft, aerospace, automobile, marine, recreational, and chemical processing industries. Mechanics of a unidirectional lamina. Transformation of stress, strain, modulus, and compliance. Off-axis engineering constants, shear and normal coupling coefficients. In-plane and flexural stiffness and compliance with different laminates, including cross-ply, angle-ply, quasiisotropic, and general bidirectional laminates. Hygrothermal effects. Strength of laminates and failure criteria. Micromechanics. Lectures: three hours per week.

MECH 423 *Casting, Welding, Heat Treating, and Non-Destructive Testing* (3.5 credits)

Prerequisite: MECH 221. Comparative analysis of the various techniques of casting, welding, powder fabrication, finishing, and non-destructive testing. Consideration of the control parameters that are essential to define both automation and robot application. Materials behaviour which determines product micro-structure and properties. Technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging, and thermomechanical processing for steels, cast irons and Al, Cu, Ni and Ti alloys. Energy conservation, worker safety, quality control, and product liability. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week, alternate weeks.

MECH 424 *MEMS — Design and Fabrication* (3.5 credits)

Prerequisite: MECH 311, 343. Introduction to microsystems and devices; mechanical properties of materials used in microsystems; microfabrication and post-processing techniques; sacrificial and structural layers; lithography, deposition and etching; introduction and design of different types of sensors and actuators; micromotors and other microdevices; mechanical design, finite element modelling; design and fabrication of free-standing structures; microbearings; special techniques: double-sided lithography, electrochemical milling, laser machining, LIGA, influence of IC fabrication methods on mechanical properties; application examples in biomedical, industrial, and space technology areas; integration, bonding and packaging of MEMS devices. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 425 *Manufacturing of Composites* (3.5 credits)

Prerequisite: MECH 311. Fibres and resins. Hand lay up. Autoclave curing. Compression molding. Filament winding. Resin transfer molding. Braiding. Injection molding. Cutting. Joining. Thermoset and thermoplastic composites. Polymer Nanocomposites. Process modelling and computer simulation. Non-destructive evaluation techniques. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 426 *Stress and Failure Analysis of Machinery* (3 credits)

Prerequisite: ENGR 233, 244. Analysis of stresses, strains and deformations in machine elements; non-symmetric bending of beams; shear centre for thin-walled beams; curved beams; torsion of non-circular shafts and tubes; thick wall cylinders; plates and shells; contact elements; stress concentrations; energy methods; failure modes, analysis and prevention; buckling, fracture, fatigue and creep. Lectures: three hours per week.

MECH 431 *Principles of Aeroelasticity* (3 credits)

Prerequisite: ENGR 243, 311. Aerodynamic loading of elastic airfoils. Phenomenon of divergence. Effect of flexible control surface on divergence of main structure. Divergence of one- and two-dimensional wing models. Phenomenon of flutter. Flutter of two- and three-dimensional wings. Flutter prevention and control. Panel flutter in high speed vehicles, flutter of turbomachine bladings, galloping vortex-induced oscillations, bridge buffeting. Lectures: three hours per week.

MECH 444 *Guided Vehicle Systems* (3 credits)

Prerequisite: MECH 375. Definition and classification of guided transportation systems. Track characterization: alignment, gage, profile, and cross-level irregularities. Wheel-rail interactions: rolling contact theories, creep forces. Modelling of guided vehicle components: wheel set, suspension, truck and car body configurations, suspension characteristics. Performance evaluation: stability hunting, ride quality. Introduction to advanced vehicles. Lectures: three hours per week.

MECH 447 *Fundamentals of Vehicle System Design* (3.5 credits)

Prerequisite: MECH 343. Mechanics and construction of wheels and tires: rolling resistance, tractive and braking forces, brake system design: components of mechanical, hydraulic and pneumatic brake systems, braking efficiency, antilock braking devices, performance characteristics of road vehicles: transmission design, driving condition diagrams, acceleration, speed and stopping distance, gradability, steering mechanisms: design and kinematics, suspension spring and shock absorbers: anti-roll and anti-pitch devices, chassis and body design considerations. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 448 Vehicle Dynamics (3 credits)

Prerequisite: MECH 447 previously or concurrently. Tire-terrain interactions; side-slip, cornering and aligning properties of tires; camber angle and camber torque; estimation of braking/tractive and cornering forces of tires; steady-state handling of road vehicles; steering response and directional stability; handling and directional response of vehicles with multiple steerable axles; handling of articulated vehicles; handling and directional response of tracked and wheeled off-road vehicles; directional response to simultaneous braking and steering. Lectures: three hours per week.

MECH 452 Heat Transfer II (3.5 credits)

Prerequisite: MECH 351, 352, 361. Heat exchangers. Condensation and boiling heat transfer. Principles of forced convection. Analysis of free convection from a vertical wall. Correlations for free convection in enclosed spaces. Mass transfer. Special topics of heat transfer. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 453 Heating, Ventilation and Air Conditioning Systems (3 credits)

Prerequisite: MECH 352. Heating and cooling load calculation. Overview of heating and air conditioning systems. Review: Vapour compression refrigeration cycles, refrigerant properties, psychometrics. Performance characteristic of components: evaporators, condensers, compressors, throttling devices (expansion valves, capillary tubes). System performance characteristics: calculation of system operating conditions based on the capacities of its components and outdoor and indoor conditions. Controls: operational, capacity. Computer-aided design methods. Defrosting. Estimation of energy consumption for heating with heat pumps. Fundamentals of refrigerant piping, water piping, and air distribution systems. Experimental methods for system development. Lectures: three hours per week.

MECH 454 Vehicular Internal Combustion Engines (3 credits)

Prerequisite: MECH 351, 361. Mechanical design of vehicular engines for different applications. Gas exchange and combustion engine processes. Combustion chambers design. Fuels for vehicular engines. Fuel supply, ignition and control systems. Cooling and lubrication of engines. Emissions formation and control. Engines' operational characteristics — matching with vehicles. Enhancement of engine performance. Engine testing. Environmental impact of vehicular engines on global pollution. Recent developments in energy efficient and "clean" engines. Design or calculation project of vehicular engine. Lectures: three hours per week.

MECH 460 Finite Element Analysis (3.75 credits)

Prerequisite: ENGR 244, 391. Formulation and application of the finite element method to modelling of engineering problems, including stress analysis, vibrations, and heat transfer. Examples illustrating the direct approach, as well as variational and weighted residual methods. Elements and interpolation functions. Meshing effect. Error analysis. One- and two-dimensional boundary value problems. Development of simple programs and direct experience with general purpose packages currently used in industry for design problems. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

MECH 461 Gas Dynamics (3.5 credits)

Prerequisite: MECH 361. Review of one-dimensional compressible flow. Normal and oblique shock waves; Prandtl-Meyer flow; combined effects in one-dimensional flow; non-ideal gas effects; multi-dimensional flow; linearized flow; method of characteristics. Selected experiments in supersonic flow, convergent-divergent nozzles, hydraulic analog and Fanno tube. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 462 Turbomachinery and Propulsion (3 credits)

Prerequisite: MECH 351, 361. Aircraft design process, preliminary sizing and thrust requirements. Rotary and fixed wing aerodynamics and stability. Helicopter configurations. Structure and fatigue design considerations. Review of the gas turbine cycle and components arrangement. Turbo-propulsion: turboprop, turbofan, turbojet and turboshafts. Energy transfer in turbomachines: Euler equation, velocity triangles. Dimensional analysis of turbomachines. Flow in turbomachines. Three-dimensional flow in turbomachines. Mechanisms of losses in turbomachines. Axial-flow turbines and compressors. Centrifugal compressors. Compressor and turbine performance maps; surge and stall. Lectures: three hours per week. Tutorial: one hour per week.

MECH 463 Fluid Power Control (3.5 credits)

Prerequisite: ENGR 361; ELEC 372 or MECH 371. Introduction to fluid power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 464 Aerodynamics (3 credits)

Prerequisite: MECH 361. Flow conservation equations, incompressible Navier-Stokes equations, inviscid irrotational and rotational flows: the Euler equations, the potential and stream function equations. Dynamics of an incompressible inviscid flow field: the Kelvin, Stokes, and Helmholtz theorems. Elementary flows and their superposition, panel method for non-lifting bodies. Airfoil and wing characteristics, aerodynamic forces and moments coefficients. Incompressible flows around thin airfoils, Biot-Savart law, vortex sheets. Incompressible flow around thick airfoils, the panel method for lifting bodies. Incompressible flow around wings, Prandtl's lifting line theory, induced angle and down-wash, unswept wings, swept wings. Compressible subsonic flow: linearized theory, Prandtl-Glauert equation and other compressibility correction rules, the area rule. Transonic flow: Von Karman's transonic small disturbance equation, transonic full potential equation, super-critical airfoils. Lectures: three hours per week.

MECH 465 Gas Turbine Design (3.5 credits)

Prerequisite: MECH 462. Review of turbo-propulsion types and energy transfer in turbomachines. Two- and three-dimensional flow. Lift and drag for airfoils. Cascade tests and correlations. Aerodynamic losses: physics, mechanisms, control of viscous effects.

Preliminary and detailed design of turbines and compressors. Structural and thermal design requirements. Failure considerations: creep, fatigue and corrosion. Performance matching. Combustion and gearbox design. Air and oil systems design requirements. Installations and acoustics. Evolution of design. Recent trends in technologies. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 471 *Microcontrollers for Mechatronics* (3.5 credits)

Prerequisite: ENGR 311; MECH 368. Introduction to the concepts and practices of microcontrollers and their application for the control of electromechanical devices and systems. Study of the internal architecture of microcontrollers; programming in assembly language for specific microcontroller functions and controller algorithms; timing of the microcontroller and interfacing with peripheral devices. Students undertake hands-on project work by controlling the position or speed of a DC motor with a feed-back sensor. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 472 *Mechatronics and Automation* (3.5 credits)

Prerequisite: MECH 215; MECH 371 previously or concurrently. Design and analysis of mechatronic and automation systems. Selection and integration of actuators, sensors, hardware, and software. Computer vision. Programming and software design for mechatronic systems. Modelling and simulation. Design of logic control systems. Finite state machine methods. Feedback control and trajectory generation. Safety logic systems. Case studies including automation systems, mobile robots, and unmanned vehicle systems. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 473 *Control System Design* (3.5 credits)

Prerequisite: ELEC 372 or MECH 371. Analog and digital controller designs. Analog controllers: lead/lag compensators, pole placement, model matching, two-parameter configuration, plant input/output feedback configuration. Digital controllers: difference equations, Z-transform, stability in the Z-domain, digital implementation of analog controllers, equivalent digital plant method, alias signals, selection of sampling time. Introduction to analog/digital state-space: controllability, observability, state feedback, state estimator. PI and PID controllers. Simulink assignments and project. Hardware laboratory project: analog and digital controller design for motor with inertial plus generator load. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

MECH 474 *Mechatronics* (3.75 credits)

Prerequisite: ELEC 372 or MECH 371. Introduction to mechatronics; basic elements of mechatronic systems. Measurement systems: including principles of measurement systems; sensors and transducers; signal conditioning processes and circuits; filters and data acquisition. Actuation systems: mechanical actuation systems and electrical actuation systems. Controllers: control modes; PID controller; performance measures; introduction to digital controllers and robust control. Modelling and analysis of mechatronic systems; performance measures; frequency response; transient response analysis; stability analysis. Lectures: three hours per week. Laboratory: three hours per week, alternate weeks.

MECH 480 *(also listed as ELEC 415)*

***Flight Control Systems* (3.5 credits)**

Prerequisite: ELEC 372 or MECH 371 or SOEN 385. Basic flight control and flight dynamics principles. Aircraft dynamic equations and performance data. Implementation of aircraft control: control surfaces and their operations, development of thrust and its control; autopilot systems, their algorithms, dynamics and interaction problems. Flight instruments, principles of operation and dynamics. Cockpit layouts — basic configuration, ergonomic design, control field forces; advanced concepts in instruments, avionics and displays; HUD; flight management systems, and communication equipment. Introduction to flight simulation: overview of visual, audio and motion simulator systems; advanced concepts in flight simulators. Lectures: three hours per week. Laboratory: two hours per week, alternate weeks.

NOTE: Students who have received credit for ELEC 415 may not take this course for credit.

MECH 481 *Materials Engineering for Aerospace* (3 credits)

Prerequisite: MECH 321. Different types of materials used in aerospace. Metals, composites, ceramics. High temperature materials. Failure prediction and prevention. Modes of material failure, fracture, fatigue, creep, corrosion, impact. Effect of high temperature and multiaxial loadings. Cumulative damage in fatigue and creep. Materials selection. Lectures: three hours per week.

MECH 482 *(also listed as ELEC 416)*

***Avionic Navigation Systems* (3 credits)**

Prerequisite: ENGR 371 or COMP 233, ELEC 370 or MECH 370 or SOEN 385. Basics of modern electronic navigation systems, history of air navigation, earth coordinate and mapping systems; basic theory and analysis of modern electronic navigation instrumentation, communication and radar systems, approach aids, airborne systems, transmitters and antenna coverage; noise and losses, target detection, digital processing, display systems and technology; demonstration of avionic systems using flight simulator. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for ELEC 416 may not take this course for credit.

MECH 485 *Introduction to Space Systems* (3 credits)

Prerequisite: MECH 351, 361. Classification of space propulsion systems; Tsiolkovskij's equation; ideal rocket and nozzle design; flight performance; basic orbital mechanics; chemical propellant rocket performance analysis; fundamentals of liquid and solid propellant rocket motors; electric, solar, fusion thruster. Lectures: three hours per week.

NOTE: Students who have received credit for this topic under a MECH 498 number may not take this course for credit.

MECH 486 Aircraft Stress Analysis (3 credits)

Prerequisite: MECH 343, 344. Definition of load paths in typical aircraft structures. Derivation of analysis procedures to enable the designer to size preliminary designs. Internal shear flow distributions that balance external loads. Stress analysis of open and closed cell beams; statically indeterminate beams and frames; single and multi cell torque boxes; symmetric heavy fuselage frames. Structural instability of columns, beams, plates and flanges in compression and shear. Centres of twist and flexure; structural warping; margins of safety; concepts of optimum design; compression surface design; lug analysis and mechanical joints; matrix analysis methods leading to the Finite Element method. Stress analysis of thin-walled metallic structures. Lectures: three hours per week.

MECH 487 Design of Aircraft Structures (3 credits)

Prerequisite: MECH 486. Aero/performance aspects of aircraft structures. Airworthiness and design considerations. Materials. Static, vibratory and aeroelastic loadings. Propulsion-induced loadings. Functions and fabrication of structural components. Stress analysis of wings, fuselages, stringers, fuselage frames, wing ribs, cut-outs in wings and fuselages, and laminated structures. Buckling of aircraft structures: local buckling, instability of stiffened panels, flexural-torsional buckling. Fracture and fatigue failures. Case studies. Lectures: three hours per week.

MECH 490A Capstone Mechanical Engineering Design Project (4 credits)

Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; MECH 344, 390. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member. Each student will undertake project work in the area of their option.

MECH 490B Capstone Mechanical Engineering Design Project (4 credits)

Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; MECH 344, 390. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member. Each student will undertake project work in the area of their option.

MECH 490C Capstone Mechanical Engineering Design Project (4 credits)

Prerequisite: 75 credits in the program; ENCS 282; ENGR 301; MECH 344, 390. A supervised design, simulation or experimental capstone design project including a preliminary project proposal with complete project plan and a technical report at the end of the fall term; a final report by the group and presentation at the end of the winter term. Lectures: one hour per week, one term. Equivalent laboratory time: three hours per week, two terms.

NOTE: Students will work in groups under direct supervision of a faculty member. Each student will undertake project work in the area of their option.

MECH 498 Topics in Mechanical Engineering (3 credits)

Prerequisite: Permission of the Department Chair. This course may be offered in a given year upon the authorization of the Mechanical and Industrial Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in a given option or options. Lectures: three hours per week.

Faculty*Chair*

PETER GROGONO, PhD C'dia., PEng, Professor

Associate Chair

THOMAS FEVENS, PhD Qu., Associate Professor

Professors

TIEN D. BUI, PhD York (Can.), ing.

GREGORY BUTLER, PhD Syd.

VACLAV CHVATAL, PhD Wat., Provost's Distinction

BIPIN C. DESAI, PhD McG.

EUSEBIUS J. DOEDEL, PhD Br.Col.

TERRILL FANCOTT, DSc Paris, ing.

VOLKER M. HAARSLEV, PhD Hamburg

HOVHANNES A. HARUTYUNYAN, PhD A.A.O.S.

BRIGITTE JAUMARD, PhD Nat'l Sup. Telecommunications

ADAM KRZYZAK, PhD Wroclaw, Poland

SUDHIR P. MUDUR, PhD Bom., PEng

LATA NARAYANAN, PhD Roch., ing.

THIRUVENGADAM RADHAKRISHNAN, PhD I.I.T.Kanpur, PEng

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RENÉ WITTE, DrIng Karlsruhe

YUHONG YAN, PhD Tsinghua/Leip., PEng

Extended Term Appointment
AIMAN HANNA, MCompSc C'dia., PEng

Affiliate Professors
P. DINI, PhD Montr.
T. KASVAND, PhD Br.Col.
L. LAM, PhD Tor.

Affiliate Associate Professor
P. CHALIN, PhD C'dia., ing.

Affiliate Assistant Professors
M. KASSAB, PhD C'dia.
T. KENGATHARAM, PhD C'dia.
M. MOHAMMAD, PhD C'dia.
E. YURASOVSKAYA, PhD Br. Col.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139
514-848-2424, ext. 3000

Objectives

Computer Science is the study and design of computer systems: hardware and software. Computer scientists are primarily concerned with the design of algorithms, languages, hardware architecture, systems software, applications software and tools. Applications range from simple game playing to the control of space vehicles, power plants and factories, from banking machines to intelligent fault and medical diagnosis. Computer professionals, in short, are concerned with the creation of computer and information systems for the benefit of society.

Software Engineering applies the principles and practices of engineering to the creation of reliable, efficient, and economical software. Software Engineering has its roots in the theory and mathematics of computer science, but carries this knowledge further towards creative applications such as software control systems for vehicles, aircraft, industrial processes; animation, interactive video, virtual reality, commercial systems for banking and financial analysis; health systems for the analysis of biological systems and the control of therapeutic devices.

It shares with engineering the rigorous methodology of analysis and design in the search for economical, reliable, and efficient solutions. Software engineers are trained in all aspects of the software life cycle, from specification through analysis and design, to testing, maintenance and evaluation of the product. They are concerned with safety and reliability of the product as well as cost and schedule of the development process. The discipline is particularly applicable to very large software projects, as well as the re-engineering of existing products.

71.70.1 Curriculum for the Degree of Bachelor of/Baccalaureate in Computer Science

The Computer Science program emphasizes fundamentals and techniques that remain relevant and useful for many years after graduation. The program consists of a combination of core courses in computer science, elective courses in computer science and mathematics, and some free electives. The Computer Science Core provides a basic and broad study of theory, mathematical basics, programming methodology, computer architecture, data structures, operating systems, and software engineering. The option courses are designed to provide an integrated yet specialized training in particular application areas of the discipline. Each option involves the study of selected advanced elective courses in computer science to provide further depth in computer science and the particular application area.

The Department offers eight options. Each option constitutes a 90-credit program that consists of courses in the following groups: Computer Science Core, Complementary Core, Option-Specific Courses, Computer Science Electives, Mathematics Electives, and General Electives.

1. The **Computer Games option** deals with the design and implementation of computer games, and the tools and techniques that are useful in developing software for computer games.
2. The **Web Services and Applications option** deals with the analysis, design, and implementation of services and applications delivered over the web.
3. The **Computer Systems option** focuses on state-of-the-art hardware and software platforms and on the tools and techniques necessary to develop software on such platforms.
4. The **Software Systems option** gives a firm grounding in diverse tools and techniques required for a wide variety of software systems.
5. The **Information Systems option** combines a major in Computer Science with approximately a third of the credits from the John Molson School of Business to create a program focusing on business applications of computer systems.

6. The **Computer Applications option** combines a major in Computer Science with a minor in a discipline of the student's choice.
7. The **Computation Arts option** combines a major in Computer Science with a major in Fine Arts specializing in the design of interactive multimedia.
8. The **Mathematics and Statistics option** combines a major in Computer Science with a major in Mathematics and Statistics.
- There is an honours program corresponding to each option (see §71.70.4). In addition, all options are offered in the co-operative format, with alternating study and work terms, for a limited number of students with suitable qualifications (see §24).

71.70.2 Degree Requirements

To be recommended for the degree of BCompSc, students must satisfactorily complete an approved program of at least 90 credits comprising the courses of the Computer Science Core and those courses specified for their particular option in accordance with the graduation requirements of §71.10.5.

Students may not register for a 400-level course before completing all of the 200-level Computer Science Core courses of their program.

The Faculty of Engineering and Computer Science is committed to ensuring that its students possess good writing skills. Hence, every student in an undergraduate degree program is required to demonstrate competence in writing English or French prior to graduation.

All students admitted to the Faculty of Engineering and Computer Science as of September 2001 must meet the writing skills requirement as outlined in §71.20.7 (Writing Skills Requirement).

If a student has satisfied the writing skills requirement prior to September 2001, or prior to transferring to the Faculty of Engineering and Computer Science, that student is deemed to have satisfied the writing skills requirement.

Newly admitted students are strongly encouraged to meet the requirement very early in their program (fall term of first year for students starting in September or winter term of first year for students starting in January) to avoid the risk of delayed graduation should remedial work prove necessary. Students who are required to take ESL courses should meet the Faculty writing skills requirements in the term following completion of their ESL courses.

Students registered in the Computer Science program must complete a minimum of 90 credits. The program offers eight options (see §71.70.1). All options consist of the Computer Science Core (32 credits), the Complementary Core (6 credits), Option-Specific Courses, Computer Science Electives, Mathematics Electives, and General Electives.

Computer Science Core (32 credits)

		<i>Credits</i>
COMP 228	System Hardware	3.00
COMP 232	Mathematics for Computer Science	3.00
COMP 233	Probability and Statistics for Computer Science	3.00
COMP 248	Object-Oriented Programming I	3.00
COMP 249	Object-Oriented Programming II	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 346	Operating Systems	4.00
COMP 348	Principles of Programming Languages	3.00
COMP 352	Data Structures and Algorithms	3.00
COMP 354	Introduction to Software Engineering	4.00
		<hr/> 32.00

Complementary Core (6 credits)

		<i>Credits</i>
ENCS 282	Technical Writing and Communication	3.00
ENCS 393	Social and Ethical Dimensions of Information and Communication Technologies	3.00
		<hr/> 6.00

Computer Science Electives

Computer Science Electives must be chosen from the following list:

- All COMP courses with numbers 325 or higher.
- SOEN 287, 321, 387, 422, 423, 487.
- COMP courses with numbers between 6000 and 6951 (maximum of eight credits, and with permission from the Department).

In every option, any credits exceeding the required number of Computer Science Elective credits will accrue towards the General Elective credits.

Mathematics Electives

Mathematics Electives must be chosen from the following list:

		<i>Credits</i>
COMP 339*	Combinatorics	3.00
COMP 361*	Elementary Numerical Methods	3.00
COMP 367*	Techniques in Symbolic Computation	3.00
ENGR 213	Applied Ordinary Differential Equations	3.00

ENGR 233	Applied Advanced Calculus	3.00
MAST 218	Multivariable Calculus I	3.00
MAST 219	Multivariable Calculus II	3.00
MAST 224	Introduction to Optimization	3.00
MAST 234	Linear Algebra and Applications I	3.00
MAST 235	Linear Algebra and Applications II	3.00
MAST 332*	Techniques in Symbolic Computation	3.00
MAST 334*	Numerical Analysis	3.00
MATH 339*	Combinatorics	3.00
MATH 392	Elementary Number Theory	3.00

In every option, any credits exceeding the required number of Mathematics Elective credits will accrue towards the General Elective credits.

*Students cannot receive credit for both COMP 339 and MATH 339; COMP 361 and MAST 334; COMP 367 and MAST 332.

General Electives

General Electives must be chosen from the following list:

- Computer Science Electives as mentioned above.
- Mathematics Electives as mentioned above.
- General Education Electives found in §71.20.2 and §71.20.6.
- Basic Science Courses list found in §71.70.9.

A course outside this list may qualify as a General Elective only with prior written permission on an ENCS Student Request form, obtainable from the Office of Student Academic Services in the Faculty of Engineering and Computer Science.

1. Computer Games Option

	<i>Credits</i>
Computer Science Core	32.00
Complementary Core	6.00
Computer Games Electives	23.00
Computer Science Electives	8.00
Mathematics Electives*	6.00
General Electives	15.00
	<hr/> 90.00

*Note: Students must take COMP 361 as part of their Mathematics Electives.

Computer Games Electives

Students must complete six courses (23 credits) from the following list of courses, including all the courses marked *.

		Credits
COMP 345*	Advanced Program Design with C++	3.00
COMP 353	Databases	4.00
COMP 371*	Computer Graphics	4.00
COMP 376*	Introduction to Game Development	4.00
COMP 472	Artificial Intelligence	4.00
COMP 476	Advanced Game Development	4.00
COMP 477	Animation for Computer Games	4.00

2. Web Services and Applications Option

	<i>Credits</i>
Computer Science Core	32.00
Complementary Core	6.00
Web Services and Applications Electives	22.00
Computer Science Electives	9.00
Mathematics Electives	6.00
General Electives	15.00
	<hr/> 90.00

Web Services and Applications Electives

Students must complete six courses (22 credits) from the following list of courses, including all the courses marked *.

		Credits
COMP 353*	Databases	4.00
COMP 445	Data Communication and Computer Networks	4.00
COMP 479	Information Retrieval and Web Search	4.00
SOEN 287*	Web Programming	3.00

SOEN 387*	Web-Based Enterprise Application Design	3.00
SOEN 423	Distributed Systems	4.00
SOEN 487	Web Services and Applications	4.00

3. Computer Systems Option

Credits

Computer Science Core	32.00
Complementary Core	6.00
Computer Systems Electives	21.00
Computer Science Electives	10.00
Mathematics Electives	6.00
General Electives	15.00
	<hr/> 90.00

Computer Systems Electives

Students must complete six courses (21 credits) from the following list of courses, including all the courses marked *.

Credits

COMP 326*	Computer Architecture	3.00
COMP 345*	Advanced Program Design with C++	3.00
COMP 426	Multicore Programming	4.00
COMP 428	Parallel Programming	4.00
COMP 445	Data Communication and Computer Networks	4.00
SOEN 422*	Embedded Systems and Software	4.00
SOEN 423	Distributed Systems	4.00

4. Software Systems Option

Credits

Computer Science Core	32.00
Complementary Core	6.00
Software Systems Core	17.00
Computer Science Electives	14.00
Mathematics Electives	6.00
General Electives	15.00
	<hr/> 90.00

Software Systems Core

Credits

COMP 326	Computer Architecture	3.00
COMP 353	Databases	4.00
COMP 361	Elementary Numerical Methods	3.00
COMP 445	Data Communication and Computer Networks	4.00
COMP 465	Design and Analysis of Algorithms	3.00
		<hr/>
		17.00

5. Information Systems Option

Credits

Computer Science Core	32.00
Complementary Core	6.00
Information Systems Electives	31.00
Computer Science Electives	15.00
Mathematics Electives	6.00
	<hr/> 90.00

Information Systems Electives

Students must complete 10 courses (31 credits) from the following list of courses, including all the courses marked *.

Credits

ACCO 220*	Financial and Managerial Accounting	3.00
BTM 387	E-Business	3.00
BTM 430	Enterprise Resource Planning and Information Technology Integration	3.00
COMM 210*	Contemporary Business Thinking	3.00
COMM 222*	Organizational Behaviour and Theory	3.00
COMM 223*	Marketing Management I	3.00

COMM 225*	Production and Operations Management	3.00
COMM 308*	Introduction to Finance	3.00
COMP 353*	Databases	4.00
DESC 445	Statistical Software for Data Management and Analysis	3.00
ECON 201*	Introduction to Microeconomics	3.00
SCOM 361	Management Science Models for Operations Management	3.00
SCOM 372	Supply Chain Planning and Control	3.00

6. Computer Applications Option

Credits

Computer Science Core	32.00
Complementary Core	6.00
Computer Science Electives	19.00
Mathematics Electives	6.00
Minor and General Electives	27.00
	<hr/> 90.00

Students must satisfy the requirements for a minor program in any other department in the University.
Students must declare their minor by the end of their first year.

7. Computation Arts Option

See §71.80 for details.

8. Mathematics and Statistics Option

See §71.85 for details.

71.70.3 Extended Credit Program

Students admitted to an Extended Credit Program (ECP) under the provisions of Sections 13.3.2 or 13.8.1 must successfully complete a minimum of 120 credits including:

90 Program requirements as set out in Section 71.70.2

12 MATH 202³, 203³, 204³, 205³

6 Chosen from courses in Humanities or Social Sciences in Section 71.20.2

12 ECP elective credits chosen from the following lists, depending on the student's option:

- a) *Computer Applications, Computer Games, Software Systems, and Web Services and Applications Options:*
12 elective credits chosen from outside the Faculty of Engineering and Computer Science, in consultation with the undergraduate program director.
- b) *Computation Arts Option:*
12 elective credits chosen from outside the Faculty of Engineering and Computer Science and the Department of Design and Computation Arts, in consultation with the undergraduate program director.
- c) *Information Systems Option:*
12 elective credits chosen from outside the John Molson School of Business and the Department of Computer Science and Software Engineering, in consultation with the undergraduate program director.
- d) *Mathematics and Statistics Option:*
12 elective credits chosen from outside the Faculty of Engineering and Computer Science and the Department of Mathematics and Statistics, in consultation with the undergraduate program director.
- e) *Computer Systems Option:*
CHEM 205³
PHYS 204³, 205³
and 3 elective credits chosen from outside the Faculty of Engineering and Computer Science, in consultation with the undergraduate program director.

71.70.4 Honours Program

Students should refer to §16.2.3 of the Calendar for academic regulations for the honours program. The following regulations are additional requirements for the Honours BCompSc program.

- Applications to enter an honours program must be submitted to the Office of the Associate Dean (Student Academic Services) at least three months before the start of the term in which the student wishes to enter an honours program.
- Students must complete at least 30 credits towards their degree before entering an honours program.
- Each student in an honours program must have an honours advisor who approves the student's choice of courses prior to each registration.
- Students who are required to withdraw from an honours program may continue in the regular program of their option provided they are in acceptable or conditional standing according to the academic regulations in §71.10.3.

Course Requirements for Honours Programs

Honours students must fulfill the requirements of their option. In addition, to receive an honours degree:

1. The student must have a final graduation GPA of at least 3.30.
2. The student must successfully complete the course COMP 490.
3. For students in the Computer Games, Computer Systems, Web Services and Applications, and Software Systems Options, at least six of the General Electives credits must be chosen from the list of Computer Science Electives.

71.70.5 Minor in Computer Science

NOTE: Admission profile is 10.12.

Minor in Computer Science		Credits
COMP 228	System Hardware	3.00
COMP 232	Mathematics for Computer Science	3.00
COMP 248	Object-Oriented Programming I	3.00
COMP 249	Object-Oriented Programming II	3.00
COMP 352	Data Structures and Algorithms	3.00
	Computer Science Electives (see §71.70.2)	9.00
		<hr/> 24.00

Students who require any of the above courses as part of their major should replace these courses with elective courses chosen from the list of Computer Science Electives.

71.70.6 Programs Related to Computer Science

Both major and minor programs in Management Information Systems can be found in the John Molson School of Business Section of the Undergraduate Calendar, §61.

The Faculty of Fine Arts and the Department of Computer Science and Software Engineering offer complementary major programs. Students who take the Computer Applications Option (see §71.70.2 above) can also take the Major in Computation Arts and Computer Science (see §71.80, and the Fine Arts Section, §81) or the Joint Major in Mathematics and Statistics and Computer Applications (see §71.85, and the Mathematics and Statistics Section, §31.200).

71.70.7 Industrial Experience and Reflective Learning Courses

Students employed full-time in a computer science position during their non-study terms may have this Industrial Experience listed on their record, provided they successfully complete the Reflective Learning course associated with this work term.

Industrial Experience work terms will be coded as COMP 107 and 207, and the associated Reflective Learning courses will be coded as COMP 108 and 208 respectively.

Students may only register for these courses with the permission of the Faculty.

The Industrial Experience terms COMP 107 and 207 carry no credit value and are used to indicate that the student is on an Industrial Experience term.

The COMP 108 and 208 Industrial Experience Reflective Learning courses are worth three credits and are marked on a pass/fail basis. They are above and beyond the credit requirements of the student's program and are not transferable nor are they included in the full- or part-time assessment status.

Students studying for a co-op work term or CIADI term should not register for these Industrial Experience and Reflective Learning courses.

71.70.8 Curriculum for the Degree of BEng in Software Engineering

The Software Engineering program is built on the fundamentals of computer science, an engineering core, and a discipline core in Software Engineering to cover the engineering approach to all phases of the software process and related topics.

The curriculum builds on the traditional computer science core topics of computer mathematics, theory, programming methodology, and mainstream applications to provide the computing theory and practice which underlie the discipline. The engineering core covers basic science, professional topics, and introduces the engineering approach to problem solving. The program core in Software Engineering includes advanced programming techniques, software specification, design, architecture, as well as metrics, security, project management, and quality control. The options cover a broad range of advanced topics, from formal methods to distributed systems.

71.70.9 Degree Requirements for the BEng in Software Engineering

Students registered in the Software Engineering program must complete a minimum of 120 credits during four years of full-time study. The program offers three options: Computer Games; Web Services and Applications; and Real-Time, Embedded, and Avionics Software. The program consists of the Engineering Core, Software Engineering Core, an option, and electives.

Engineering Core (30.5 credits)

See §71.20.5

Software Engineering Core		Credits
SOEN 228	System Hardware	4.00
SOEN 287	Web Programming	3.00
SOEN 331	Introduction to Formal Methods for Software Engineering	3.00
SOEN 341	Software Process	3.00
SOEN 342	Software Requirements and Specifications	3.00
SOEN 343	Software Architecture and Design I	3.00
SOEN 344	Software Architecture and Design II	3.00
SOEN 345	Software Testing, Verification and Quality Assurance	3.00
SOEN 357	User Interface Design	3.00
SOEN 384	Management, Measurement and Quality Control	3.00
SOEN 385	Control Systems and Applications	3.00
SOEN 390	Software Engineering Team Design Project	3.50
SOEN 490	Capstone Software Engineering Design Project	4.00
	Computer Science Group	22.00
	Two Basic Science courses	6.00
		69.50

Computer Science Group		Credits
COMP 232	Mathematics for Computer Science	3.00
COMP 248	Object-Oriented Programming I	3.00
COMP 249	Object-Oriented Programming II	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 346	Operating Systems	4.00
COMP 348	Principles of Programming Languages	3.00
COMP 352	Data Structures and Algorithms	3.00
		22.00

Basic Science Courses

Two Basic Science courses must be selected from the following:

		Credits
BIOL 206	Elementary Genetics	3.00
BIOL 208	Environmental Biology	3.00
BIOL 226	Biodiversity and Ecology	3.00
BIOL 261	Molecular and General Genetics	3.00
CHEM 209	Discovering Biotechnology	3.00
CHEM 217	Introductory Analytical Chemistry I	3.00
CHEM 221	Introductory Organic Chemistry I	3.00
CHEM 234	Physical Chemistry I: Thermodynamics	3.00
GEOL 206	Earthquakes, Drifting Continents and Volcanoes	3.00
GEOL 208	The Earth, Moon and the Planets	3.00
PHYS 252	Optics	3.00
PHYS 253	Electricity and Magnetism I	3.00
PHYS 273	Energy and Environment	3.00
PHYS 334	Thermodynamics	3.00
PHYS 354	Electricity and Magnetism II	3.00
PHYS 384	Introduction to Astronomy	3.00
PHYS 385	Astrophysics	3.00

Options

Students must complete at least 20 credits with a minimum of 15 credits from one of the options listed below, including all the courses marked *, and at least one course marked **, and the remainder chosen from the electives list.

Computer Games (CG) Option

		Credits
COMP 345	Advanced Program Design with C++	3.00
COMP 371*	Computer Graphics	4.00
COMP 376*	Introduction to Game Development	4.00
COMP 472	Artificial Intelligence	4.00
COMP 476**	Advanced Game Development	4.00
COMP 477**	Animation for Computer Games	4.00

Web Services and Applications (WSA) Option

		Credits
COMP 353*	Databases	4.00
COMP 445	Data Communication and Computer Networks	4.00
COMP 479**	Information Retrieval and Web Search	4.00
SOEN 321	Information Systems Security	3.00
SOEN 387*	Web-Based Enterprise Application Design	3.00
SOEN 487**	Web Services and Applications	4.00

Real-Time, Embedded, and Avionics Software (REA) Option

		Credits
COEN 320	Introduction to Real-Time Systems	3.00
COMP 345	Advanced Program Design with C++	3.00
COMP 444	System Software Design	4.00
SOEN 422*	Embedded Systems and Software	4.00
SOEN 423*	Distributed Systems	4.00
MECH 480**	Flight Control Systems	3.50
MECH 482**	Avionic Navigation Systems	3.00

Electives

		Credits
COMP 345	Advanced Program Design with C++	3.00
COMP 353	Databases	4.00
COMP 371	Computer Graphics	4.00
COMP 426	Multicore Programming	4.00
COMP 428	Parallel Programming	4.00
COMP 442	Compiler Design	4.00
COMP 445	Data Communication and Computer Networks	4.00
COMP 451	Database Design	4.00
COMP 465	Design and Analysis of Algorithms	3.00
COMP 472	Artificial Intelligence	4.00
COMP 473	Pattern Recognition	4.00
COMP 474	Intelligent Systems	4.00
COMP 478	Image Processing	4.00
COMP 479	Information Retrieval and Web Search	4.00
SOEN 422	Embedded Systems and Software	4.00
SOEN 423	Distributed Systems	4.00
SOEN 431	Formal Methods	3.00
SOEN 448	Management of Evolving Systems	3.00
ENGR 411	Special Technical Report	1.00

71.70.10 Course Descriptions

Please note that new course numbers have been implemented. For equivalent course numbers under the old system, please consult §200.6.

Students from outside the Faculty of Engineering and Computer Science who are not registered in a Computer Science program may not take more than five COMP courses numbered higher than 212.

Students from outside the Faculty of Engineering and Computer Science who are registered for the Minor in Computer Science may not take more than 30 credits of COMP courses numbered higher than 212.

COMPUTER SCIENCE

COMP 108 Computer Science Industrial Experience Reflective Learning I (3 credits)

Prerequisite: Permission of the Faculty. This course is a reflective learning module for students in their related field which is based on their academic requirements and their first industrial experience.

COMP 201 Introduction to Computing (3 credits)

Prerequisite: MATH 201 or equivalent. Overview of computing systems. Problem solving and algorithms. Introduction to computer programming. Hardware, software and data storage, programming languages, data organization, program design and development. Lectures: three hours per week. Tutorial: one hour per week.

NOTES: 1. Students who have received credit for COMP 218, COMP 248, or COEN 243 may not take this course for credit.
2. This course may not be taken for credit in the regular undergraduate programs in Engineering and Computer Science.

COMP 208 Computer Science Industrial Experience Reflective Learning II (3 credits)

Prerequisite: COMP 108 and permission of the Faculty. This course expands on the students' second industrial experience term in their related field of study to further develop their knowledge and work-related skills.

COMP 218 Fundamentals of Programming (3 credits)

Prerequisite: MATH 201 or equivalent (no prior experience with computers is assumed). Computers and computing: problem solving with computers, basic data types, expressions, assignments, control structures, simple library functions, programmer-defined functions, arrays of basic types. Basic elements of object-oriented programming: classes, objects and methods. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 248 may not take this course for credit.

COMP 228 System Hardware (3 credits)

Prerequisite: COMP 248; MATH 203 or 209 or Cegep Mathematics 103 or NYA previously or concurrently; MATH 204 or 208 or Cegep Mathematics 105 or NYC previously or concurrently. Levels of system abstraction and von Neumann model. Basics of digital logic design. Data representation and manipulation. Instruction set architecture. Processor internals. Assembly language programming. Memory subsystem and cache management. I/O subsystem. Introduction to network organization and architecture. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for SOEN 228 may not take this course for credit.

COMP 229 System Software (3 credits)

Prerequisite: COMP 228; COMP 248; MATH 203 or 209 or Cegep Mathematics 103 or NYA; MATH 204 or 208 or Cegep Mathematics 105 or NYC. Hardware-software interface, system kernel, system services, system evolution. Assemblers, compilers, linkers, and loaders. System component interfaces. User-level view of operating systems. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for SOEN 229 or COEN 311 may not take this course for credit.

COMP 232 Mathematics for Computer Science (3 credits)

Prerequisite: MATH 203 or 209 or Cegep Mathematics 103 or NYA previously or concurrently; MATH 204 or 208 or Cegep Mathematics 105 or NYC previously or concurrently. Sets. Propositional logic and predicate calculus. Functions and relations. Elements of number theory. Proof techniques: direct proof, indirect proof, proof by contradiction, proof by induction. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for COMP 238 or COEN 231 may not take this course for credit.

COMP 233 Probability and Statistics for Computer Science (3 credits)

Prerequisite: MATH 205 or Cegep Mathematics 203 or NYB. Combinatorics. Axioms of probability. Conditional probability. Discrete and continuous probability distributions. Expectation and moments. Hypothesis testing. Parameter estimation. Correlation and linear regression. Applications to computer science. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for ENGR 371, STAT 249, STAT 250, COMM 215, MAST 221, MAST 333 may not take this course for credit.

COMP 248 Object-Oriented Programming I (3 credits)

Prerequisite: MATH 204 or 208 or Cegep Mathematics 105 or NYC previously or concurrently. Introduction to programming. Basic data types, variables, expressions, assignments, control flow. Classes, objects, methods. Information hiding, public vs. private visibility, data abstraction and encapsulation. References. Arrays. Lectures: three hours per week. Tutorial: two hours per week.

NOTE: Students who have received credit for COMP 218 may not take this course for credit.

COMP 249 Object-Oriented Programming II (3 credits)

Prerequisite: COMP 248; MATH 203 or 209 or Cegep Mathematics 103 or NYA; MATH 205 or Cegep Mathematics 203 or NYB previously or concurrently. Design of classes. Inheritance. Polymorphism. Static and dynamic binding. Abstract classes. Exception handling. File I/O. Recursion. Interfaces and inner classes. Graphical user interfaces. Generics. Collections and iterators. Lectures: three hours per week. Tutorial: two hours per week.

COMP 318 Introduction to Database Applications (4 credits)

Prerequisite: COMP 218 or COMP 248, or a course in C, C++, or Java. This is a hands-on course on database technology intended for non-computer science students in engineering, science, business, or arts. It emphasizes practical issues in application development while introducing the fundamentals of databases with a focus on the relational data model and the Structured Query Language (SQL). Upon completion of this course, students will be able to design and implement databases, and develop user interfaces to access, search, and update the database through the Internet using the web technology. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COMP 353 may not take this course for credit.

NOTE: Students in the BCompSc program may not take this course for credit.

COMP 326 Computer Architecture (3 credits)

Prerequisite: COMP 346. Computer architecture models: control-flow and data-flow. Concurrency and locality, data dependency theory. Instruction level parallelism. Instruction scheduling. Pipelined processors. Vector processors. Thread level parallelism. Multiprocessors. Shared memory models. Coherence protocols. Interconnection networks. Performance issues. Advanced topics in contemporary computer architectures. Lectures: three hours per week. Tutorial: one hour per week.

COMP 327 Digital System Design (4 credits)

Prerequisite: COMP 228 or SOEN 228. Basic theory and techniques related to the design of digital systems: design specifications, manipulation of Boolean expressions and its relation to logic circuit design. Sequential circuit design. Design with SSI and MSI circuits. Interfacing with devices. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

COMP 335 Introduction to Theoretical Computer Science (3 credits)

Prerequisite: COMP 232 or COEN 231; COMP 249 or COEN 244. Finite state automata and regular languages. Push-down automata and context-free languages. Pumping lemmas. Applications to parsing. Turing machines. Undecidability and decidability. Lectures: three hours per week. Tutorial: one hour per week.

COMP 339 Combinatorics (3 credits)

Prerequisite: COMP 232 or 18 credits in post-Cegep Mathematics. General principles of counting, permutations, combinations, identities, partitions, generating functions, Fibonacci numbers, Stirling numbers, Catalan numbers, principle of inclusion-exclusion. Graphs, subgraphs, isomorphism, Euler graphs, Hamilton paths and cycles, planar graphs, Kuratowski's Theorem, trees, colouring, 5-colour theorem, matching, Hall's theorem.

NOTE: Students who have received credit for MATH 339 may not take this course for credit.

COMP 345 Advanced Program Design with C++ (3 credits)

Prerequisite: COMP 352 previously or concurrently. Introduction to C++. I/O with stream classes. Pointers and their uses. The Standard Template Library (STL): containers, algorithms, iterators, adaptors, function objects. Class design: constructors, destructors, operator overloading, inheritance, virtual functions, exception handling, memory management. Advanced topics: libraries, locales, STL conventions, concurrency, template metaprogramming. Applications of C++: systems, engineering, games programming. Project. Lectures: three hours per week.

NOTE: Students who have received credit for COMP 446 may not take this course for credit.

COMP 346 Operating Systems (4 credits)

Prerequisite: COMP 228 or SOEN 228; COMP 352. Fundamentals of operating system functionalities, design and implementation. Multiprogramming: processes and threads, context switching, queuing models and scheduling. Interprocess communication and synchronization. Principles of concurrency. Synchronization primitives. Deadlock detection and recovery, prevention and avoidance schemes. Memory management. Device management. File systems. Protection models and schemes. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COEN 346 may not take this course for credit.

COMP 348 Principles of Programming Languages (3 credits)

Prerequisite: COMP 249. Survey of programming paradigms: Imperative, functional, and logic programming. Issues in the design and implementation of programming languages. Declaration models: binding, visibility, and scope. Type systems, including static and dynamic typing. Parameter passing mechanisms. Hybrid language design. Lectures: three hours per week. Tutorial: one hour per week.

COMP 352 Data Structures and Algorithms (3 credits)

Prerequisite: COMP 232 previously or concurrently; COMP 249. Abstract data types: stacks and queues, trees, priority queues, dictionaries. Data structures: arrays, linked lists, heaps, hash tables, search trees. Design and analysis of algorithms: asymptotic notation, recursive algorithms, searching and sorting, tree traversal, graph algorithms. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COEN 352 may not take this course for credit.

COMP 353 Databases (4 credits)

Prerequisite: COMP 352 or COEN 352. Introduction to database management systems. Conceptual database design: the entity-relationship model. The relational data model and relational algebra: functional dependencies and normalization. The SQL language and its application in defining, querying, and updating databases; integrity constraints; triggers. Developing database applications. Other data models: Datalog. Object-oriented data model and ODL. Semi-structured data. Project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COMP 318 may not take this course for credit.

COMP 354 Introduction to Software Engineering (4 credits)

Prerequisite: COMP 352; ENCS 282. Software development process models (e.g. linear vs. iterative). Project management; roles, activities and deliverables for each software life cycle phase. Requirements management: analysis, elicitation, and scope. Architecture, design and the mapping of requirements to design and design to implementation. Traceability. Software quality assurance: verification, validation and the role of testing. Maintenance and evolution. Project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

NOTES: 1. Students who have received credit for SOEN 341 may not take this course for credit.

2. Students in the BEng in Software Engineering program may not take this course for credit.

COMP 361 *Elementary Numerical Methods* (3 credits)

Prerequisite: COMP 232, 249. Vector and matrix norms. Numerical methods for solving linear systems, Gaussian elimination, LU decomposition, error analysis. Numerical solution of nonlinear equations, Newton's method, fixed point iterations. Interpolation and approximation, Taylor, Lagrange, Chebyshev and Legendre polynomials. Cubic spline interpolation. Numerical differentiation, numerical integration, Gauss quadrature. Discrete least-squares approximation. Initial value problems in ordinary differential equations, stiff differential equations. Boundary value problems in ordinary differential equations. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for ENGR 391 or MAST 334 may not take this course for credit.

COMP 367 *Techniques in Symbolic Computation* (3 credits)

Prerequisite: COMP 232 or MAST 217; COMP 248 or MAST 234. Symbolic computation and its use in pure and applied mathematics, in particular in algebra, number theory, cryptography, coding theory, and combinatorics. Programming in a symbolic computing system (e.g. MAPLE).

NOTE: Students who have received credit for MAST 332 may not take this course for credit.

COMP 371 *Computer Graphics* (4 credits)

Prerequisite: COMP 352 or COEN 352. Introduction to computer graphics and graphics hardware. Introduction to graphics API and graphics systems architecture. Mathematics of 2D and 3D transformations, and 2D and 3D viewing. Colour and basic rendering algorithms. Visual realism and visibility. Illumination and shading, global illumination techniques, and textures. Introduction to curves and surfaces, and 3D object modelling. Introduction to computer animation. Project. Lectures: three hours per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COMP 471 may not take this course for credit.

COMP 376 *Introduction to Game Development* (4 credits)

Prerequisite: COMP 371 previously or concurrently. Introduction to design and implementation aspects of computer gaming: basic game design, storytelling and narratives, and game genres. Virtual environments, 2D and 3D game engines, and game development tools. Character development, gameplay strategies, level design in games, and user interfaces. Architecture of game consoles, analog and digital controllers, and the incorporation of graphics, sound, and music in game implementations. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 426 *Multicore Programming* (4 credits)

Prerequisite: COMP 346 or COEN 346. Fundamental concepts of computer architecture. Architecture of the selected multicore platform. Review of shared-memory parallel programming. The difficulties inherent to parallel programming. Scalability of programming models. The stream programming model for multicore. Implicit and explicit threading. Implicit and explicit orchestration of data movement, both on chip and off. Adapting standard algorithms to multicore. Critical assessment of the available system-software support. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 428 *Parallel Programming* (4 credits)

Prerequisite: COMP 346. Parallel programming techniques as a natural extension to sequential programming. Overview of parallel programming architectures and models. Parallel programming issues: locality, granularity, scheduling, data decomposition and distribution, load balancing, communication and synchronization, determinacy and non-determinacy, cost and performance. Techniques and tools for message-passing parallel programming. Case studies. Project. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

COMP 442 *Compiler Design* (4 credits)

Prerequisite: COMP 228 or SOEN 228 or COEN 311; COMP 335; COMP 352 or COEN 352. Compiler organization and implementation: lexical analysis and parsing, syntax-directed translation, code optimization. Run-time systems. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 444 *System Software Design* (4 credits)

Prerequisite: COMP 346. Detailed examination of the design, implementation and system call interface of a contemporary operating system: its kernel, file system, process and thread management including scheduling, file system design and implementation, memory management, device management, I/O management, interprocess communication and synchronization mechanisms, system call interface, interrupt handling, and other advanced issues. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 445 *Data Communication and Computer Networks* (4 credits)

Prerequisite: COMP 346. Network architectures: OSI and Internet models. Link layer: error detection, multiple access protocols, addressing. Local area networks: Ethernet, ATM, switches and hubs. Network layer: forwarding and routing, IP, routing algorithms, multicast. Transport layer: connectionless and connection-oriented transport, reliable data transport, congestion control, QoS, UDP and TCP. Application layer: DNS, the web and http, file transfer, and email. Introduction to network security, multimedia protocols and wireless networking. Lectures: three hours per week. Laboratory: two hours per week.

COMP 451 *Database Design* (4 credits)

Prerequisite: COMP 353. Storage management. Buffer management. Data organization. Index structures. Query optimization and execution. Transaction management. Recovery. Concurrency control. Database performance analysis and tuning. New trends in database technology. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 465 *Design and Analysis of Algorithms* (3 credits)

Prerequisite: COMP 335; COMP 352 or COEN 352. Order statistics: worst-case, average-case and amortized analysis. Algorithm design techniques: greedy algorithms, dynamic programming. Selected algorithms from graph theory, linear programming, number theory, string matching, and computational geometry. A survey of hard problems, NP-completeness, and approximation algorithms. Lectures: three hours per week.

COMP 472 *Artificial Intelligence* (4 credits)

Prerequisite: COMP 352 or COEN 352. Scope of AI. First-order logic. Automated reasoning. Search and heuristic search. Game-playing. Planning. Knowledge representation. Probabilistic reasoning. Introduction to machine learning. Introduction to natural language processing. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 473 *Pattern Recognition* (4 credits)

Prerequisite: COMP 352. Preprocessing. Feature extraction and selection. Similarity between patterns and distance measurements. Syntactic and statistical approaches. Clustering analysis. Bayesian decision theory and discriminant functions. Neural networks and machine learning. Applications. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 474 *Intelligent Systems* (4 credits)

Prerequisite: COMP 352 or COEN 352. Rule-based expert systems, blackboard architecture, and agent-based. Knowledge acquisition and representation. Uncertainty and conflict resolution. Reasoning and explanation. Design of intelligent systems. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 475 *Human-Computer Interaction* (3 credits)

Prerequisite: COMP 352. Importance of human-computer interactions in modern computer applications: desktop, hand-held, and embedded computers. Empirical nature of user interface testing and evaluation. Input and output: devices, methods and media. Human cognition and user modelling. Relating task models and dialog models to user interface (UI) design. Principles of graphical UI design and user-centred design. Usability definitions and usability testing. Relevant ISO standards. Case studies. Lectures: three hours per week.

COMP 476 *Advanced Game Development* (4 credits)

Prerequisite: COMP 361 or ENGR 391; COMP 376. Introduction to advanced aspects of computer games. Artificial Intelligence: acting, game state, perception, reacting, searching, and learning. Group behaviour, non-player characters and bots, opponent modelling, and strategy. Physics-based techniques: path-finding and collision detection and response. Networked gaming: multi-player games, networking and distributed game design, massively multi-player online games (MMOGs). Improving realism: advanced rendering techniques such as ray-tracing, GPU programming, 3D scene management, level-of-detail, terrains, and 3D sound. Testing for games. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 477 *Animation for Computer Games* (4 credits)

Prerequisite: COMP 361 or ENGR 391; COMP 371. Introduction to the algorithms, data structures, and techniques used in modelling and rendering dynamic scenes. Topics include principles of traditional animation, production pipeline, animation hardware and software, orientation representation and interpolation, modelling physical and articulated objects, forward and inverse kinematics, motion control and capture, key-frame, procedural, and behavioural animation, camera animation, scripting system, and free-form deformation. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 478 *Image Processing* (4 credits)

Prerequisite: COMP 352. Digital image fundamentals, image transforms (Fourier, Walsh, Haar, Hotelling, wavelet), image enhancement (histogram processing, spatial filtering, high- and low-pass filtering), image restoration, image compression (elements of information theory, image compression models, error-free compression, lossy compression, image compression standards), image segmentation (line detection, Hough transform, edge detection and linking, thresholding, region splitting and merging), representation and description (chain codes, signatures, skeletons, shape descriptors, moments, texture). Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 479 *Information Retrieval and Web Search* (4 credits)

Prerequisite: COMP 233 or ENGR 371; COMP 352. Basics of information retrieval (IR): boolean, vector space and probabilistic models. Tokenization and creation of inverted files. Weighting schemes. Evaluation of IR systems: precision, recall, F-measure. Relevance feedback and query expansion. Application of IR to web search engines: XML, link analysis, PageRank algorithm. Text categorization and clustering techniques as used in spam filtering. Project. Lectures: three hours per week. Laboratory: two hours per week.

COMP 490 *Computer Science Project I* (3 credits)

Prerequisite: ENCS 282; completion of 60 credits; permission of the Department. Students work on a computer science project under the supervision of a faculty member and submit a suitable written report on the work carried out. Students planning to register for this course should consult with the Department prior to registration in the final year of study.

NOTE: Students can register for COMP 490 by itself or, with the permission of the Department, students can register for COMP 490 and 492 concurrently and carry out a major project.

COMP 492 Computer Science Project II (3 credits)

Prerequisite: COMP 490 previously or concurrently; permission of the Department. Students work on a computer science project under the supervision of a faculty member and submit a suitable written report on the work carried out. Students planning to register for this course should consult with the Department prior to registration in their final year of study.

NOTE: Students can register for COMP 492 by itself or, with the permission of the Department, students can register for COMP 490 and 492 concurrently and carry out a major project.

COMP 495 Honours Seminar (1 credit)

Prerequisite: ENCS 282; registration in the final year of the honours program. Students are required to attend a number of departmental seminars and submit a written report on them.

COMP 498 Topics in Computer Science (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Department. The content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

SOFTWARE ENGINEERING**SOEN 228 System Hardware** (4 credits)

Prerequisite: MATH 203 or 209 or Cegep Mathematics 103, MATH 204 or 208 or Cegep Mathematics 105. Processor structure, Data and Instructions, Instruction Set Processor (ISP) level view of computer hardware, assembly language level use. Memory systems — RAM and disks, hierarchy of memories. I/O organization, I/O devices and their diversity, their interconnection to CPU and Memory. Communication between computers at the physical level. Networks and computers. Lectures: three hours per week. Tutorial: two hours per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COMP 228 may not take this course for credit.

SOEN 287 Web Programming (3 credits)

Prerequisite: COMP 248. Internet architecture and protocols. Web applications through clients and servers. Markup languages. Client-side programming using scripting languages. Static website contents and dynamic page generation through server-side programming. Preserving state (client-side) in web applications. Lectures: three hours per week. Tutorial: two hours per week.

SOEN 321 Information Systems Security (3 credits)

Prerequisite: COMP 346. Protocol layers and security protocols. Intranets and extranets. Mobile computing. Electronic commerce. Security architectures in open-network environments. Cryptographic security protocols. Threats, attacks, and vulnerabilities. Security services: confidentiality; authentication; integrity; access control; non-repudiation; and availability. Security mechanisms: encryption; data-integrity mechanisms; digital signatures; keyed hashes; access-control mechanisms; challenge-response authentication; traffic padding; routing control; and notarization. Key-management principles. Distributed and embedded firewalls. Security zones. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 331 Introduction to Formal Methods for Software Engineering (3 credits)

Prerequisite: COMP 232, 249. Assertions. Static and dynamic checking. Method specification using preconditions and postconditions. Strengthening and weakening. Design by contract. Hoare logic. Invariants. Class specification using invariants. Software tools for assertion checking and verification. Reliable software development. Lectures: three hours per week. Tutorial: two hours per week.

SOEN 341 Software Process (3 credits)

Prerequisite: COMP 352 or COEN 352; ENCS 282 previously or concurrently. Basic principles of software engineering. Introduction to software process models. Activities in each phase, including review activities. Working in teams: organization; stages of formation; roles; conflict resolution. Notations used in software documentation. How to review, revise, and improve software documentation. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for COMP 354 may not take this course for credit.

SOEN 342 Software Requirements and Specifications (3 credits)

Prerequisite: SOEN 341. Requirements engineering. Functional and non-functional requirements. Traceability. Test generation. Formal and informal specifications. Formal specification languages. Reasoning with specifications. Correctness issues. Verification. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 343 Software Architecture and Design I (3 credits)

Prerequisite: SOEN 341; SOEN 342 previously or concurrently. From requirements to design to implementation. Planned vs. evolutionary design and refactoring. Model-driven design and Unified Modelling Language (UML). Structural and behavioural design descriptions and specifications. General and domain-specific design principles, patterns and idioms. Object-oriented design concepts such as interfaces vs. abstract types, polymorphism, generics, and delegation vs. subclassing. Introduction to software architecture (styles and view models). Design quality. Design rationale. Design methodologies (e.g. based on responsibility assignment). Test-driven development. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 344 Software Architecture and Design II (3 credits)

Prerequisite: SOEN 343. Architectural activities, roles, and deliverables. Architectural view models. Architectural styles (including client-server, layered, pipes-and-filters, event-based, process control) and frameworks. Architectural analysis and the interplay with requirements elicitation. Notations for expressing architectural designs, structural and behavioural specifications. From architectural design to detailed design. Domain specific architectures and design patterns. Evaluation and performance estimation of designs. Advanced object-oriented design patterns and idioms. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 345 Software Testing, Verification and Quality Assurance (3 credits)

Prerequisite: SOEN 343 previously or concurrently. Testing strategies. Specification-based vs. code-based, black-box vs. white-box, functional vs. structural testing; unit, integration, system, acceptance, and regression testing. Verification vs. validation. Test planning, design and artifacts. Introduction to software reliability and quality assurance. Formal verification methods, oracles; static and dynamic program verification. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 357 User Interface Design (3 credits)

Prerequisite: SOEN 342. The human side: I/O; memory; and information processing. Interaction: mental models; human error; interaction frameworks and paradigms. Direct manipulation. User interface design: principles; standards; and guidelines. User-centred design: standards and design rationale; heuristic evaluation; iterative design; and prototyping. Task-centred design. Rationalized design: usability engineering; dialogue notations; user models; diagrammatic notations; and textual notations. Evaluation: with the user; without the user; quantitative; and qualitative. Implementation support. Help and documentation. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 384 Management, Measurement and Quality Control (3 credits)

Prerequisite: ENCS 282; SOEN 341. Organization of large software development. Roles of team members, leaders, managers, stakeholders, and users. Tools for monitoring and controlling a schedule. Financial, organizational, human, and computational resources allocation and control. Project and quality reviews, inspections, and walkthroughs. Risk management. Communication and collaboration. Cause and effects of project failure. Project management via the Internet. Quality assurance and control. Lectures: three hours per week. Tutorial: one hour per week.

NOTE: Students who have received credit for SOEN 383 may not take this course for credit.

SOEN 385 Control Systems and Applications (3 credits)

Prerequisite: ENGR 213, 233. Mathematical modelling of dynamical systems; block diagrams; feedback; open and closed loops. Linear differential equations; time domain analysis; free, forced, and total response; steady state and transient response. Laplace transform and inverse transform; second order systems. Transfer functions and stability. Control system design: PID and root locus techniques. Computer simulation of control systems. Applications. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 387 Web-Based Enterprise Application Design (3 credits)

Prerequisite: COMP 353; COMP 354 or SOEN 341; SOEN 287. Hypertext Transfer Protocol (HTTP), web mark-up languages and encodings. Document Object Models (DOM). Client/server and layered architectures for Web-based Enterprise Applications (WEA). Presentation, Domain and Data Source design patterns. Client-side programming. Java servlets and Java Server Pages. Authentication, security and transaction processing. Lectures: three hours per week. Tutorial: one hour per week.

SOEN 390 Software Engineering Team Design Project (3.5 credits)

Prerequisite: SOEN 344 and 357 previously or concurrently. Students work in teams to design and implement a software project from requirements provided by the coordinator. Each team will demonstrate the software and prepare adequate documentation for it. In addition, each student will write an individual report. Lectures: two hours per week. Tutorial: one hour per week. Laboratory: three hours per week.

SOEN 422 Embedded Systems and Software (4 credits)

Prerequisite: COMP 346. Characteristics of embedded systems. Microcontroller architecture and typical target systems. Programming issues related to mixed languages. Real-time kernel services: task management; intertask communication and synchronization; memory management; time management; interrupt support; configuration; and initialization. Development methods: state machines and fuzzy logic. Debugging methods for interrupts. Testing and simulation methods. Lectures: three hours per week. Tutorial one hour per week. Laboratory: two hours per week.

NOTE: Students who have received credit for COEN 421 may not take this course for credit.

SOEN 423 Distributed Systems (4 credits)

Prerequisite: COMP 346. Principles of distributed computing: scalability, transparency, concurrency, consistency, fault tolerance, high availability. Client-server interaction technologies: interprocess communication, sockets, group communication, remote procedure call, remote method invocation, object request broker, CORBA, web services. Server design techniques: process replication, fault tolerance through passive replication, high availability through active replication, coordination and agreement, transactions and concurrency control. Lectures: three hours per week. Tutorial one hour per week. Laboratory: two hours per week.

SOEN 431 Formal Methods (3 credits)

Prerequisite: SOEN 342, 343. Components of formal systems. Formal methods; levels of formalism. Integrating formal methods into the existing software life-cycle process model for a given project. Attributes of a formal specification language. Formal notations

based on extended finite state machines; case studies involving the design of user interfaces, reactive systems, and concurrent systems. Software development using formal methods, including tools for type checking; debugging; verifying checkable properties; validation of refinements; and code generation from refinements. Lectures: three hours per week.

SOEN 448 *Management of Evolving Systems* (3 credits)

Prerequisite: SOEN 342, 343, 344. Software maintenance: corrective; perfective; and adaptive. Software reuse; construction of reusable software. Techniques for reverse engineering and re-engineering software. Software development as “growing” software. Long-term evolution of software systems. Legacy systems. Lectures: three hours per week.

SOEN 449 *Component Engineering* (3 credits)

Prerequisite: SOEN 344. Review of high-level language concepts and abstraction mechanisms. Programming with functional and logical languages. Typed vs. untyped languages. The use of scripting languages and other language-based techniques to assemble systems from high-level components. Lectures: three hours per week.

SOEN 487 *Web Services and Applications* (4 credits)

Prerequisite: SOEN 387 previously or concurrently. Analysis and design of web services and applications. Advanced architectures for the design, deployment, and testing of large multi-server web services and applications. Service Oriented Architecture (SOA). Electronic Commerce. Security. Load balancing. Stress testing. Lectures: three hours per week. Tutorial: one hour per week. Laboratory: two hours per week.

SOEN 490 *Capstone Software Engineering Design Project* (4 credits)

Prerequisite: SOEN 390. Students work in teams of between six and nine members to construct a significant software application. The class meets at regular intervals. Team members will give a presentation of their contribution to the project. Lectures: one hour per week. Laboratory: two hours per week. Two terms.

SOEN 498 *Topics in Software Engineering* (3 credits)

Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Department. The content may vary from offering to offering and will be chosen to complement the available elective courses. Lectures: three hours per week.

Faculty

Undergraduate Program Director
JOEY PAQUET, PhD Laval, Associate Professor

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139
514-848-2424, ext. 3000

Objectives

The Faculty of Engineering and Computer Science and the Faculty of Fine Arts have created a program of study which combines a comprehensive education in computer science and a complementary set of courses of equivalent value in the fine arts. This program resides in both Faculties. In the Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science, Computer Applications Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, or a Bachelor of/Baccalaureate in Fine Arts program. The Fine Arts offering is described in §81.90. The Computer Science program is described below.

Curriculum

The Computer Applications Option may be taken with a Major in Computation Arts. It consists of 45 credits in Computer Science complemented by 45 credits of study in Fine Arts. It provides a foundation for the integration of the arts and computer science as hybrid digital media arts and multimedia productions.

The Computation Arts core focuses on three areas of digital media: image works, sound exploration, and 3D modelling/animation. Through the integration of theory and practice, the programs aim at developing interdisciplinary cultural and technological practices, for independent arts initiatives, industry, and client-based productions.

The core courses are open-ended and flexible to accommodate change that will run parallel to technological advancements in industry and give students a strong base in multimedia research. Design Art, Electroacoustics, Film Animation, and the Studio Electronic Arts provide the Fine Arts electives, which further supports the cross-disciplinary nature of the program directives.

This program will give graduates the conceptual abilities and technical skills they need to practise as hybrid cultural workers in the rapidly expanding field of multimedia. Students will have many more options to fine-tune a multimedia program according to their individual needs and expectations. Courses have been restructured into three credits to facilitate computer lab access, and flexibility in course sequencing and offerings, as well as to accommodate completion of the program within a co-op structure. Students of Computation Arts must bear the costs of annual laboratory fees.

Structure of the Program**Computation Arts Option**

The program consists of 45 credits in Computer Science and 45 credits in Fine Arts, as described below:

		<i>Credits</i>
	Computer Science Core (see §71.70.2)	32.00
	Complementary Core (see §71.70.2)	6.00
	Computation Arts Core (see §81.90.2)	45.00
COMP 345	Advanced Program Design with C++	3.00
COMP 371	Computer Graphics	4.00
		<hr/> 90.00

Admission Requirements

The Computation Arts Major is limited to students who are enrolled in or simultaneously applying for the Computer Science Applications Option and who are qualified for the Fine Arts component. Applicants must fulfill the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option. In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Computation Arts. All applicants must submit a portfolio to the Program Office, Visual Arts Building, Room 244, on or before March 1. Further information may be obtained by contacting the Department of Design and Computation Arts.

71.85

MATHEMATICS AND STATISTICS AND COMPUTER APPLICATIONS

Faculty

Undergraduate Program Director
JOEY PAQUET, PhD Laval, Associate Professor

Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139
514-848-2424, ext. 3000

Objectives

The Faculty of Engineering and Computer Science and the Faculty of Arts and Science have created a program of study which combines a comprehensive education in computer science and mathematics. This program resides in both Faculties. In the Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science, Computer Applications Option. According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, Bachelor of/Baccalaureate in Science program, or Bachelor of/Baccalaureate in Arts program. The Arts and Science offering is described in §31.200. The Computer Science program is described below.

Curriculum

The Computer Applications Option may be taken with a Major in Mathematics and Statistics. It provides a foundation for integrated studies in computer science and mathematics.

The mathematics component of the program includes topics that overlap with computer science, such as modelling, symbolic computation, and combinatorics, as well as the standard topics of a mathematical curriculum.

Structure of the Program

The program consists of 90 credits.

Mathematics and Statistics Option	Credits
Computer Science Core (see §71.70.2)*	32.00
Complementary Core (see §71.70.2)	6.00
Mathematics and Statistics Core	36.00
Computer Science Electives (see §71.70.2)	4.00
General Electives (see §71.70.2)	12.00
	<hr/> 90.00

*COMP 232 may be replaced by MAST 217. COMP 233 must be replaced by MAST 221.

Mathematics and Statistics Core		Credits
COMP 361	Elementary Numerical Methods*	3.00
COMP 367	Techniques in Symbolic Computation**	3.00
COMP 465	Design and Analysis of Algorithms	3.00
MAST 218	Multivariable Calculus I	3.00
MAST 219	Multivariable Calculus II	3.00
MAST 224	Introduction to Optimization	3.00
MAST 232	Mathematics with Computer Algebra	3.00
MAST 234	Linear Algebra and Applications I	3.00
MAST 235	Linear Algebra and Applications II	3.00

MAST 331	Mathematical Modelling	3.00
MAST 333	Applied Statistics	3.00
MATH 339	Combinatorics	3.00
		<hr/> 36.00

*COMP 361 may be replaced by MAST 334.

**COMP 367 may be replaced by MAST 332.

Admission Requirements

The Computer Science and Mathematics and Statistics program is restricted to students who are enrolled in or simultaneously applying for the Computer Science Applications Option and who are qualified for the mathematics component. Applicants must fulfill the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option. For admission requirements for the mathematics component, see §31.200.

Faculty

Chair

DEBORAH DYSART-GALE, PhD *Pitt.*, RN, Associate Professor

Associate Chair

GOVIND GOPAKUMAR, PhD *Rensselaer Poly.Inst.*, Assistant Professor

Associate Professor

JESSICA MUDRY, PhD *Pitt.*

Assistant Professors

MATHEW HARSH, PhD *Edin.*

KETRA SCHMITT, PhD *Carnegie-Mellon*

Assistant Professor Emerita

BERNICE GOLDSMITH, BA *C'dia.*

Extended Term Appointment

NANCY ACEMIAN, MCompSc *C'dia.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 002.257

514-848-2424, ext. 5443

Objectives

The Centre for Engineering in Society (CES) has been created with two major objectives. The primary objective of the CES is to blend the teaching of engineering and technology with skills needed for students to become professionals who are responsible, articulate and ethical. The CES brings complementary skills and knowledge to engineering and information technology training by offering suitable courses.

An additional objective of the CES is to coordinate and manage those graduate and undergraduate courses in engineering, engineering mathematics, and computer science that are common to multiple departments within the Faculty of Engineering and Computer Science.

Faculty

Director

MOURAD DEBBABI, PhD *Paris*, Professor

Associate Director

RACHIDA DSSOULI, PhD *Montr.*, Professor

Professors

AMIN HAMMAD, PhD *Nagoya*

AMR YOUSSEF, PhD *Qu.*, PEng

YONG ZENG, PhD *Calg.*, PEng

Associate Professors

CHADI ASSI, PhD *C.U.N.Y.*, PEng

ABDESSAMAD BEN HAMZA, PhD *N.Carolina State*, PEng

JAMAL BENTAHAR, PhD *Laval*, PEng

NIZAR BOUGUILA, PhD *Sher.*, PEng

BENJAMIN FUNG, PhD *S.Fraser*, PEng

ROCH GLITHO, PhD *Royal Inst.Tech., Stockholm*

ZHIGANG TIAN, PhD *Alta.*

LINGYU WANG, PhD *George Mason*, PEng

Assistant Professors

ANJALI AWASTHI, PhD *INRIA (Nancy)*

SIMON LI, PhD *Tor.*, PEng

MOHAMMAD MANNAN, PhD *Car.*

ANDREA SCHIFFAUEROVA, PhD *Montr.*

CHUN WANG, PhD *W.Ont.*, PEng

Affiliate Professors

PRABIR BHATTACHARYA, PhD *Oxf.*

DJEMEL ZIOU, PhD *Inst.Nat.Poly.Lorraine*

Affiliate Associate Professors

FRANÇOIS COSQUER, PhD *Tech.Lisbon*

STÉPHANE CÔTÉ, PhD *S'ton.*

IBRAHIM KAMEL, PhD *Maryland (College Park)*

RUIXUAN LI, PhD *Huazhong Sci.&Tech.*

MARTIN MAIER, PhD *Tech.Berlin*

MAKAN POURZANDI, PhD *Lyon I*

ANDREW L. VALLERAND, PhD *Laval*

FAYI ZHOU, PhD *Alta.*

Affiliate Assistant Professors

SAMIR SEBBAH, PhD *C'dia.*

ADEL SERHANI, PhD *C'dia.*

KHALED SHABAN, PhD *Wat.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 007.640

514-848-2424, ext. 5847

Objectives

The Concordia Institute for Information Systems Engineering is an interdisciplinary fundamental research and R&D learning institute, housing state-of-the-art research in innovative applications of information systems to a wide range of areas, among them systems, telecommunications, software development, electronics, multimedia, aerospace, finance and banking, automotive, manufacturing, and building and construction management.

The Concordia Institute for Information Systems Engineering offers only graduate programs.

Faculty of Fine Arts

81.10	PROGRAMS AND ADMISSION REQUIREMENTS	81.90	DESIGN AND COMPUTATION ARTS
		81.90.1	Design
		81.90.2	Computation Arts
81.20	DEGREE REQUIREMENTS	81.100	MUSIC
81.30	FINE ARTS COURSES OF FACULTY-WIDE INTEREST	81.110	STUDIO ARTS
		81.110.1	Studio Art
81.40	ART EDUCATION	81.110.2	Ceramics
		81.110.3	Fibres and Material Practices
81.50	ART HISTORY	81.110.4	Intermedia/Cyberarts
		81.110.5	Painting and Drawing
81.60	MEL HOPPENHEIM SCHOOL OF CINEMA	81.110.6	Photography
81.60.4	Interdisciplinary Studies in Sexuality	81.110.7	Print Media
		81.110.8	Sculpture
81.70	CONTEMPORARY DANCE	81.120	THEATRE
81.80	CREATIVE ARTS THERAPIES		

Section 81

81

FACULTY OF FINE ARTS

Dean

CATHERINE WILD, MFA Wis.(Madison)

Associate Deans

ANA CAPPELLUTO, MEd McG., *Planning and Academic Facilities*

MARK SUSSMAN, PhD N.Y., *Academic and Student Affairs*

HAIDEE WASSON, PhD McG., *Research*

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 2.781

514-848-2424, ext. 4600

finearts.concordia.ca

Objectives

The Faculty of Fine Arts is recognized internationally for its long-standing record of excellence in undergraduate education in the visual, performing, cinematic, design, and electronic arts. The Faculty strives to create an environment that reflects the openness and diversity of contemporary culture, with a strong commitment to integrating new technologies with traditional fine arts practices. Programs and courses in studio or academic disciplines situate students within both the pluralism of the university academic experience and an active urban arts milieu.

81.10 PROGRAMS AND ADMISSION REQUIREMENTS

General admission requirements are listed in §13. Specific requirements for admission to the various programs leading to the BFA degree are set out in the first column of the following listings. They refer to the table of Cegep profiles and other specific requirements defined below.

Profile	Requirements
0.00	Diploma of Collegial Studies (DEC — Diplôme d'études collégiales)
10.12	Mathematics 103, 105, 203
A	Interview/Audition
G	Letter of intent
K	Submission of a portfolio of representative work

Programs offered:

For information concerning any of the following programs, please consult the calendar section listed opposite each program.

Recommended Profile and Specific Requirements	Program	Calendar Section
	<i>Specializations:</i>	
0.00, G,K	Art Education – Visual Arts	81.40
0.00, A,G,K	Design for the Theatre	81.120
0.00, G,K	Film Production	81.60
0.00	Film Studies	81.60
0.00, A	Jazz Studies	81.100
0.00, A	Music Performance Studies	81.100
0.00, A	Music Composition	81.100
0.00, A,G	Theatre and Development	81.120
0.00, A,G	Theatre Performance	81.120

Majors:

0.00, G,K	Art Education – Visual Arts	81.40
0.00	Art History	81.50
0.00	Art History and Film Studies	81.50, 81.60
0.00, G,K	Art History and Studio Art	81.50
0.00, G,K	Ceramics	81.110
0.00, 10.12, G,K	Computation Arts	81.90
0.00, A	Contemporary Dance	81.70
0.00, G,K	Design	81.90
0.00, G,K	Electroacoustic Studies	81.100
0.00, G,K	Fibres and Material Practices	81.110
0.00, G,K	Film Animation	81.60
0.00, G,K	Film Production	81.60
0.00	Film Studies	81.60
0.00, G,K	Intermedia/Cyberarts	81.110
0.00, A	Music	81.100
0.00, G,K	Painting and Drawing	81.110
0.00, G,K	Photography	81.110
0.00, A,G,K	Playwriting	81.120
0.00, G,K	Print Media	81.110
0.00, G,K	Sculpture	81.110
0.00, G,K	Studio Art	81.110
0.00, A,G,K	Theatre	81.120

Minors:

0.00, G,K	Art Education – Visual Arts	81.40
0.00	Art History	81.50
0.00, G,K	Art History and Studio Art	81.50
0.00, G	Cinema	81.60
0.00, G,K	Computation Arts	81.90
0.00, G,K	Electroacoustic Studies	81.100
0.00, G,K	Film Animation	81.60
0.00	Film Studies	81.60
0.00	Interdisciplinary Studies in Sexuality	81.60.4
0.00, Theory Test	Music	81.100
0.00, G,K	Photography	81.110
0.00, G,K	Print Media	81.110
0.00	Theatre	81.120

Transfer Students

Applicants who have completed courses in other colleges or universities may be granted transfer credits towards their program at Concordia University. These transfer credits will normally be awarded as general credits and as such may not be equivalent to specific first-year courses at Concordia.

Applicants to a second undergraduate degree must complete a minimum of 60 credits, other than those credited towards the first degree, at least 36 of which must be taken in the new field of specialization (§16.1.3). Students transferring credits towards a first degree must complete a minimum of 45 credits at Concordia (see §16.1.3).

Students must complete all program and degree requirements, as well as the Faculty of Fine Arts residence requirements (see §81.20.2).

Mature Entry

General admission requirements to the 108-credit program (Mature Entry) are listed in §14. Students admitted into the Faculty of Fine Arts through the Mature Entry plan are required to complete 18 credits in addition to the 90 credits normally required for the BFA degree.

Extended Credit Program

Definition of the Extended Credit Program (ECP) is listed in §13.2. Students admitted to an Extended Credit Program in Fine Arts are required to complete an additional 30 credits for the degree. Transfer credits awarded for Ontario Academic Courses (OACs) must be applied towards the ECP portion of a student's degree program.

81.20 DEGREE REQUIREMENTS

Students preparing for the BFA degree require a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours of work spread across lectures, conferences, tutorials, studios, rehearsals or practice periods, tests, examinations, and personal work.

81.20.1 BFA Degree Requirements

1. A candidate for the BFA degree must have qualified for admission to, and successfully completed a program of concentration in the form of a specialization (see §16.2.3) or major (see §16.2.3) program in the Faculty of Fine Arts. A selection is made upon entry, prior to registration. The requirement of selecting a program upon entry should not be thought of as being necessarily a final commitment. Students wishing to transfer out of one degree program must satisfy the admission requirements of the program they seek to enter. Program changes are, however, subject to limitations where certain programs are in great demand. Students should be aware that to effect certain transfers they may be required to complete more than the 90 credits normally required for the degree.
 2. A candidate for graduation must satisfy the Fine Arts General Education requirement by successfully completing a minimum of six credits from course offerings outside the Fine Arts academic sectors (Visual Arts and Performing Arts). The non-Fine Arts academic sectors are defined as: Humanities, Social Sciences, Sciences, Business, Engineering and Computer Science. BFA students graduating with the Major in Computation Arts – Option Computer Applications double program or the Specialization in Art Education – Visual Arts will be considered as having satisfied the General Education requirement. The courses FLIT 382; COMS 301, 304, 416, 434 can only be applied within a student's degree as electives from the Visual Arts sector and therefore do not fulfill the General Education requirement. This list is subject to modification.
 3. A candidate for graduation must have successfully completed the course FFAR 250⁶.
 4. A candidate for graduation normally may apply no more than 54 credits in studio work towards the 90 credits required for the BFA degree.
 5. The credits obtained for any course may not be used to satisfy the requirements of more than one program.
 6. Students may take a maximum of six ESL credits towards a 90- or 108-credit degree, and a maximum of 12 credits towards the 120-credit degree.
-

81.20.2 Residence Requirements

Students are subject to the university residence requirement (see §16.1.3) which states that of the 90 credits required for the BFA degree, a minimum of 45 credits must be taken at Concordia University. Combining both residence requirements implies that the full-time student must enrol for a minimum of two years of study at Concordia University.

To fulfill the residence requirements for a BFA degree with a concentration in:

1. Ceramics, Fibres and Material Practices, Painting and Drawing, Print Media, Sculpture, or Studio Art: a minimum of 30 credits in Studio Art and six credits in Art History must be completed at Concordia.
 2. Art Education – Visual Arts, Art History, Art History and Studio Art, Art History and Film Studies, Computation Arts, Design, Film Animation, Film Production, Film Studies, Photography, Contemporary Dance, or Intermedia/Cyberarts: at least half of the concentration requirements must be completed at Concordia.
 3. Theatre, Theatre and Development, Theatre Performance, Playwriting, or Design for the Theatre: a minimum of 30 credits from the Department of Theatre must be completed at Concordia.
 4. Music, Electroacoustic Studies, Jazz Studies, Music Performance Studies, or Music Composition: a minimum of 30 credits required from the Department of Music must be completed at Concordia.
 5. Minor programs: at least half of the required credits must be completed at Concordia.
-

81.20.3 Course Load

The normal course load for students enrolled in the Faculty of Fine Arts is 30 credits per year for all full-time students, and a maximum of 18 credits per year for part-time students.

- i) Full-time students may not register for more than 18 credits of their maximum 30 credits in any studio area in any given academic year. Part-time students may not register for more than 12 credits.
- ii) Students may register for a maximum of six credits in which films are produced as a course requirement during any given academic year. See §81.60.2 for list of courses. Also, students are limited, during their degree program, to 18 credits in Film Production or 24 credits in Film Animation courses in which films are produced as a course requirement (§81.60.2).
- iii) Students may register for a maximum of six credits in Theatre Production in any given academic year, up to a maximum of 18 credits in all.
- iv) Students may register for a maximum of six credits in Music Private Study in any given academic year, up to a maximum of 12 credits in the Major in Music degree program, and 18 credits in a specialization in music degree program.
- v) Students may register for a maximum of nine credits in Independent Study courses in their degree program. In the case of disciplines not offering three-credit Independent Study courses, students may register for a maximum of two six-credit Independent Study courses in their degree program.

81.20.4 Academic Performance Requirements

The system used by the Faculty of Fine Arts to assess academic performance at the undergraduate level is based on the annual weighted grade point average (WGPA). See §16.3.11 for definition of annual WGPA.

Acceptable standing requires that a student obtain an annual WGPA of at least 2.00.

NOTE: Although a "C-" grade (1.70 grade points) is designated as satisfactory for an individual course in §16.3.3, an annual WGPA of 2.00 is required to remain in acceptable standing.

Conditional standing results when a student obtains an annual WGPA of less than 2.00, but at least 1.50. A student is not permitted to obtain two consecutive conditional standing assessments.

Students in conditional standing may not write supplemental examinations and will not be permitted to register for further study until their program has been approved by the appropriate advisor in their Faculty or department. They must obtain acceptable standing at the time of their next assessment.

Failed standing results when a student obtains an annual WGPA of less than 1.50, or conditional standing in two consecutive periods of assessment. Failed students may not write supplemental examinations. In order to continue in their program, failed students must apply for readmission through the Office of Student Affairs. If readmitted, failed students will be placed on academic probation. In addition, there may be other conditions determined by the Faculty at the time of readmission. Decisions of the relevant authority in the Faculty are final. Failed students wishing to be admitted to another Faculty must apply through the Dean's Office of the Faculty to which they wish to be admitted.

Graduation Requirements

Students must satisfy all course requirements, be in acceptable standing, and have a minimum final graduation GPA of 2.00. Potential graduates who fail to meet the requirements of acceptable standing, but meet the requirements of conditional standing, will have the following options:

- a) register for an additional 12 credits and, at the next assessment, meet the requirements for acceptable standing;
or
- b) register for fewer than 12 additional credits. In this case, standing will be determined on the basis that these extra credits constitute an extension of the last assessment period.

For both option a) and option b), the additional courses taken must be selected in consultation with the student's department.

81.20.5 Lapsed Program

Students enrolled in a specialization or major program in the Faculty of Fine Arts who have not registered for a course for nine consecutive terms or more will have a lapsed notation entered on their student record. Lapsed students must meet with the appropriate advisor in order to resume their program and be made aware of possible program modifications. In some cases, students might be required to submit a new application.

81.30 FINE ARTS COURSES OF FACULTY-WIDE INTEREST

The following courses provide a format in which topics of Faculty-wide interest are considered:

FFAR:

FFAR 250 *The Visual and Performing Arts in Canada* (6 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus.

NOTE: Students who have received credit for FFAR 251 or 252 or IDYS 250 may not take this course for credit.

FFAR 251 *The Visual and Performing Arts in Canada I* (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus. This course is equivalent to the first term of FFAR 250.

NOTE: Students enrolled in a BFA program must register for FFAR 250. Students who have received credit for FFAR 250 or 252 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 251 may not take this course for credit.

FFAR 252 *The Visual and Performing Arts in Canada II* (3 credits)

A lecture course surveying the current practice and theory of the visual and performing arts in Canada, with a special focus on interdisciplinary forms. The institutional, regional, and cultural traditions of the arts in Canada are discussed as contexts of

contemporary developments; as well, artistic avant-gardes are related to popular cultures and the media. Invited guests and other experts in various disciplines are an essential part of the syllabus. This course is equivalent to the second term of FFAR 250.

NOTE: Students enrolled in a BFA program must register for FFAR 250. Students who have received credit for FFAR 250 or 251 in a previous academic year may not take this course for credit.

NOTE: Students who have received credit for IDYS 252 may not take this course for credit.

FFAR 253 *Art, Science and Technology: Interactions* (3 credits)

An introduction, for non-Fine Arts students, to the rich historical and contemporary relationships between art, science, and technology. Topics range from the scientific and engineering drawings of Leonardo, through to the influence of scientists such as Isaac Newton, the impact of the scientific and industrial revolutions on 19th- and 20th-century aesthetic concerns, to the Internet and "new media." The course does not require prior knowledge of the visual arts, science, or technology.

NOTE: Students enrolled in a Fine Arts program (BFA specialization, major, or minor) may not take this course for credit.

NOTE: Students who have received credit for this topic under an FFAR 398 number may not take this course for credit.

FFAR 290 *(also listed as INTE 270)*

***HIV/AIDS: Cultural, Social and Scientific Aspects of the Pandemic* (6 credits)**

An interdisciplinary survey of the major issues and challenges of the HIV pandemic. Such topics as the biology of the virus, therapeutic, clinical and epidemiological research developments, the social costs of sexual taboos and discrimination, and media and artistic representation by and of people with HIV are presented by faculty and visiting community experts. The epidemics in the Western hemisphere, Africa, Asia, and other regions are addressed. Learning is based on lectures, weekly tutorials, and community involvement.

NOTE: Students who have received credit for FFAR 390, INTE 270, INTE 390, or for this topic under an FFAR 398 or INTE 398 number, may not take this course for credit.

FFAR 291 *HIV/AIDS: An Interdisciplinary Introduction to Scientific, Social and Cultural Aspects* (3 credits)

This course is an interdisciplinary survey of the major issues and challenges of the AIDS pandemic, introducing students to a broadly based overview of its scientific, social and cultural impacts. It also examines the interaction of personal and experiential perspectives with collective values, beliefs and behaviours in response to the health crisis worldwide and locally. Students examine the history of the pandemic and responses to it by governments, medical authorities, businesses, religious and community groups, as well as artists and cultural producers. Readings and requirements are diverse in nature and it is possible to submit creative work as part of the course assignments.

NOTE: Students who have received credit for FFAR 290, 390, INTE 270, 390, or for this topic under an INTE 398, COMS 399, or SOCI 399 number, may not take this course for credit.

FFAR 298 *Special Topics in Fine Arts* (3 credits)

A course at the introductory level which provides an opportunity for the study of specialized aspects of Fine Arts.

NOTE: This course may not be applied within a BFA degree or any Fine Arts specialization, major, or minor program.

FFAR 299 *Special Topics in Fine Arts* (6 credits)

A course at the introductory level which provides an opportunity for the study of specialized aspects of Fine Arts.

NOTE: This course may not be applied within a BFA degree or any Fine Arts specialization, major, or minor program.

FFAR 398 *Special Topics in Fine Arts* (3 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts. *NOTE C/See §200.3*

FFAR 399 *Special Topics in Fine Arts* (6 credits)

A course which provides an opportunity for the study of specialized aspects of Fine Arts. *NOTE C/See §200.3*

81.40

ART EDUCATION

Faculty

Chair

DAVID PARISER, DEd Harv., Professor

Distinguished Professor Emerita

LEAH SHERMAN, MA N.Y.

Professors Emeriti

ANDREA FAIRCHILD, PhD U.Q.A.M.

PAUL LANGDON, PhD McG.

CATHY MULLEN, PhD Penn.State

ROBERT J. PARKER, PhD Iowa

ELIZABETH J. SACCÀ, PhD Penn.

Associate Professors

LORRIE BLAIR, PhD Ohio State

RICHARD LACHAPELLE, PhD C'dia.

LINDA SZABAD-SMYTH, PhD McG.

Assistant Professors

JUAN CARLOS CASTRO, PhD Br.Col.

ANITA SINNER, PhD Br.Col.

KATHLEEN VAUGHAN, PhD York (Can.)

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 2.619

514-848-2424, ext. 4646

Department Objectives

The Art Education Department offers two teacher preparation programs that emphasize the student's development as artist, researcher, and professional. Students are expected to develop an artistic and teaching practice that connects conceptual understanding, critical reflection, and practical experience. The Major in Art Education – Visual Arts is a three-year program. In the first two years, students are introduced to the fundamentals of the field of art education. In the third year, students concentrate on professional practice and performance as community art educators in settings such as community centres, adult education programs, recreation programs, and museums.

The Specialization in Art Education – Visual Arts is a four-year program leading to teacher certification as an elementary- and secondary-school art specialist. The program conforms to the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST) requirements for an extended teaching practicum and preparation in visual arts. The number of practicum hours is determined by the MESRST and may be subject to change.

The Minor in Art Education – Visual Arts is a 24-credit program designed to give students familiarity and ability with the basics of the theory and practice of community arts education, and may be particularly useful to visual artists who anticipate that some project-based teaching work will supplement their studio practice.

Programs

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

N.B. The BFA Specialization in Art Education – Visual Arts leads to teacher certification by the Ministère de l'Enseignement supérieur, de la Recherche, de la Science et de la Technologie (MESRST).

120 BFA Specialization in Art Education – Visual Arts

- 24 ARTE 220³, 230³, 320³, 330³, 340³, 420³, 422³, 424³
- 3 EDUC 301³ or 305³
- 9 ARTE 352³, 354³, 498³
- 15 ARTE 421³, 423³, 425³
- 6 Chosen from ARTE 398³ offerings
- 6 FFAR 250⁶
- 12 DRAW 200⁶; PTNG 200⁶
- 6 Studio Art courses chosen from FBRS 240⁶, 260⁶; CERA 230⁶; SCUL 210⁶
- 6 Studio Art electives
- 6 Art History courses chosen from Group C
- 6 Studio Art or Art History electives
- 6 Free electives
- 15 EDUC 210⁶, 445³, 450³, 454³

66 BFA Major in Art Education – Visual Arts

- 21 ARTE 220³, 230³, 320³, 330³, 340³, 432³, 434³
- 6 Studio Art courses chosen from CERA 230⁶; FBRS 240⁶, 260⁶; SCUL 210⁶; PTNG 200⁶
- 6 Studio Art electives
- 3 ARTE 398³
- 6 DRAW 200⁶
- 6 Chosen from ARTE 352³, 354³, 398³, 498³
- 6 Art History electives
- 6 Studio Art or Art History elective credits
- 6 EDUC 210⁶

NOTE: This program does not lead to teacher certification. Electives permit a wider choice in courses in preparation for graduate study in areas such as art therapy, museum education, recreation, and arts administration.

24 Minor in Art Education – Visual Arts

- 15 ARTE 203³, 320³, 330³, 432³, 434³
- 9 Art Education courses chosen from ARTE 352³, 354³, 398³, 498³

NOTE: Students may take up to six credits in ARTE 398.

NOTE: This program may be especially useful for students in the Major in Studio Arts or combined Major in Art History and Studio Arts who wish to learn the basics of community arts theory and practice.

81.40.1 Admission to the Specialization, Major, and Minor in Art Education – Visual Arts

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Art Education – Visual Arts and the Minor in Art Education – Visual Arts. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

All successful applicants interested in the Specialization in Art Education – Visual Arts are automatically enrolled in the Major in Art Education – Visual Arts. The Specialization in Art Education – Visual Arts is offered at the third-year and fourth-year levels. Upon completion of the second year (completion of 60 credits including ARTE 220, 230, 320, 330), students in the Major in Art Education – Visual Arts may apply for transfer to the Specialization in Art Education – Visual Arts program. Admission to the Specialization in Art Education – Visual Arts is assessed on the basis of the applicant's suitability for school-based teaching, grades for courses completed in the first two years, a letter of intent, two references, the completion of a 70-hour internship in an elementary school (ARTE 230), and, in some cases, an interview. Students must apply to the Department by the deadline of March 1.

Academic Standing

To remain in good academic standing in the specialization and be recommended for the Quebec Art Specialist teaching permit, students must:

1. Achieve at least a "B" grade in the practicum courses ARTE 420, 423, and 425.
 - a. Students who fail any of the above courses are required to withdraw from the specialization program.
 - b. Students who obtain a passing grade in any of the above courses that is below a "B" will be placed on conditional standing within the program and will be so informed in writing. These students will be allowed to repeat the practicum only once in order to achieve the required grade. Students who do not achieve the required grade in the repeated course will be required to withdraw from the specialization program.
2. Maintain an overall grade average of "B-" or higher in courses of the third and fourth years. Students who do not maintain the minimum grade average during that time will be required to withdraw from the specialization program.

NOTE: ARTE 423 is evaluated on a pass/fail basis and therefore is not included in the calculation of the grade point average.

3. To be recommended to the Quebec Teachers Certification Service for a Quebec permanent teaching diploma, students must satisfy the English language proficiency requirements of the program.

Courses

Art Education:

ARTE 201 *Art in Early Childhood I* (3 credits)

Prerequisite: Enrolment in the Specialization in Early Childhood or Major in Child Studies, or written permission of the Department. An introductory study of the art-making process in early childhood. This course is a studio workshop which investigates potential media and teaching approaches appropriate for the young child.

NOTE: Students enrolled in the Major in Art Education – Visual Arts or the Specialization in Art Education – Visual Arts programs may not take this course for credit.

ARTE 202 *Art in Early Childhood II* (3 credits)

Prerequisite: ARTE 201. A continuation of ARTE 201.

NOTE: Students enrolled in the Major in Art Education – Visual Arts or the Specialization in Art Education – Visual Arts programs may not take this course for credit.

ARTE 203 *Arts in Recreation* (3 credits)

In this workshop/seminar course, students are introduced to various art forms currently used in recreation centres. Intrinsic to the course content is a consideration of the role of the arts in recreation and leisure populations.

NOTE: Students enrolled in the Major in Art Education – Visual Arts or the Specialization in Art Education – Visual Arts programs may not take this course for credit.

ARTE 220 *Foundations of Art Education* (3 credits)

A survey of content and contexts of the art education profession. In studio activities, students explore art-making skills and techniques, creative expression, artistic heritage and art in society. This content is related to lesson planning for schools, museums, and community settings. Students are introduced to children's artistic development as well as basic management and safety standards for the art classroom. Practicum experiences will include observation of children's art processes and some teaching.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 230 *Practicum: Observation and Analysis of Children's Learning* (3 credits)

Prerequisite: ARTE 220. This practicum course gives students first-hand experience and knowledge of children's learning as it occurs in the schools. It also provides students with a theoretical framework for observing and analyzing individual and group learning processes in the art classroom. It permits students to develop preliminary skills in assessing and meeting the needs of individual children. Students are introduced to methods for evaluating learning and for critically reflecting on learning and teaching. The practicum experience consists of a placement in a primary school one day a week for a total of 70 hours.

NOTE: Students who have received credit for ARTE 200 may not take this course for credit.

ARTE 320 *Multidisciplinary Approaches to Art and Teaching* (3 credits)

Prerequisite: ARTE 230 or written permission of the Department. This course investigates various creative, historical, and critical approaches to art as a basis for developing curriculum content. Students expand their repertoire of skills and techniques for planning and teaching lessons with multiple dimensions. Students also consider the specific requirements of students with special needs and those at different age levels. This course includes a practicum component.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 330 *Introduction to Community Art Education* (3 credits)

Prerequisite: ARTE 320 or written permission of the Department. The course investigates the various issues and concerns related to community art education. Students develop skills in assessing community needs. After observation and studio research, students develop and propose an art education curriculum for a specific community setting or population. This course includes a practicum component.

NOTE: Students who have received credit for ARTE 300 may not take this course for credit.

ARTE 340 *Art Education for Adolescents and Adults* (3 credits)

Prerequisite: 24 credits in the Major or Specialization in Art Education – Visual Arts. Students are introduced to theories of adolescent and adult development, and the effect these have on their behaviour and attitudes towards learning and art making. Students learn about different types of group management and support techniques appropriate for adolescent and adult students. The course presents ways to effectively integrate aspects of popular culture into curriculum planning.

ARTE 352 *Light-Based Media* (3 credits)

Prerequisite: 24 credits in the Major or Specialization in Art Education – Visual Arts, or permission of the Department. Students develop proficiency in a variety of imaging processes, including traditional and digital photography, that are suitable for school or community art education programs. Students investigate related approaches to teaching and curriculum.

NOTE: Students are expected to have basic computing skills or to have completed INTE 290 before registering for this course. Students who have received credit for ARTE 430 may not take this course for credit.

ARTE 354 *Time-Based Media* (3 credits)

Prerequisite: 24 credits in the Major or Specialization in Art Education – Visual Arts, or permission of the Department. Students develop proficiency in a variety of time-based media, including video and multimedia installations that are suitable for school or community art education programs. Students investigate related approaches to teaching and curriculum.

NOTE: Students are expected to have basic computing skills or to have completed INTE 290 before registering for this course. Students who have received credit for ARTE 430 may not take this course for credit.

ARTE 398 *Special Topics in Art Education* (3 credits)

This course provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year.

ARTE 420 *Art Education for Elementary School* (3 credits)

Prerequisite: ARTE 330. Students apply theories of development and learning to design appropriate lessons for elementary school practicum settings. The course explores currently available teaching resources such as textbooks, MESRST curriculum, and communication technologies. The course also investigates processes and procedures for assessment appropriate to an elementary art classroom.

ARTE 421 *Practicum in the Elementary School* (3 credits)

Prerequisite: ARTE 330. Student teachers observe and assist an elementary school classroom teacher in the development and implementation of an effective art program during a practicum of 140 hours. Student teachers also observe the social and cultural dynamics of the school and initiate positive interactions with their students and professional colleagues.

ARTE 422 *Art Education in the Secondary School I* (3 credits)

Prerequisite: ARTE 434. A lecture/seminar course where students identify themes and concerns that are appropriate to secondary-school students with diverse backgrounds. Students explore the currently available teaching resources such as MESRST curriculum and others, textbooks and communication technology.

ARTE 423 *Practicum in the Secondary School I* (3 credits)

Prerequisite: ARTE 420, 434; EDUC 200. Student teachers observe and assist a secondary-school art specialist in the development and implementation of an effective art program during a practicum of 140 hours. Student teachers also observe the social and cultural dynamics of the school and initiate positive interactions with their students and professional colleagues.

ARTE 424 *Art Education in the Secondary School II* (3 credits)

Prerequisite: ARTE 422. The course concentrates on the objectives, goals, and content of the *MESRST Secondary School Curriculum Guidelines* in visual arts. Students analyze, reflect on, and evaluate their own practice and philosophy of art learning and teaching within the wider context of school and society.

ARTE 425 *Practicum in the Secondary School II* (9 credits)

Prerequisite: ARTE 423. This course is a 350-hour teaching practicum in a secondary school. Student teachers implement curriculum planning and classroom management that respects ethnic, socio-economic, and cultural diversity, and that successfully integrates students with special needs. Student teachers also apply safe use of art materials and appropriate art learning assessment procedures.

ARTE 432 *Community Art Education: Theory and Practice* (3 credits)

Prerequisite: ARTE 330 or written permission of the Department. Students connect theory and practice by planning and teaching appropriate art events for a particular community setting or population. Students investigate organizational and administrative approaches necessary for successful community art education programming. This course includes a practicum component.

ARTE 434 *Professional Practice for Art Educators* (3 credits)

Prerequisite: ARTE 420 or 432. Students develop, teach, and then evaluate an art program during a practicum in a community setting. Students formulate and express a philosophy of teaching art in a community setting that connects theory, critical thinking, reflective practice and fieldwork experience. Students investigate entrepreneurial skills needed to market community art programs. Students must complete a practicum in a community setting.

ARTE 498 *Special Topics in Inter-Related Media and Technologies* (3 credits)

Prerequisite: 24 credits in the Major or Specialization in Art Education – Visual Arts, or permission of the Department. This course provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year. *NOTE: Students are expected to have intermediate computing skills in image-manipulation processes, word processing, and Internet searches.*

81.50

ART HISTORY

Faculty

Chair

CYNTHIA HAMMOND, PhD *C'dia.*, Associate Professor

Professors

JEAN BELISLE, PhD *Paris*

MARTHA LANGFORD, PhD *McG.*, Concordia Research Chair and Director, Jarislowsky Institute

LOREN LERNER, PhD *Montr.*

CATHERINE MACKENZIE, PhD *Tor.*

Associate Professors

KRISTINA HUNEAULT, PhD *Manc.*, Concordia Research Chair

ALICE MING WAI JIM, PhD *McG.*

JOHN POTVIN, PhD *Qu.*

JOHANNE SLOAN, PhD *Kent*

ANNE WHITELAW, PhD *C'dia.*

Assistant Professors

ELAINE CHEASLEY PATERSON, PhD *Qu.*

STEVEN STOWELL, PhD *Oxf.*

Lecturer

HEATHER IGLOLIORTE

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 3.809

514-848-2424, ext. 4700

Department Objectives

Art History provides the student scholar and the student artist with an understanding of creative and visual responses to the world in both the past and the present. Art History is a lively, at times even controversial, discipline that encourages the study of art objects with its historical, cultural, political, social, and economic contexts. The Department of Art History offers a full range of courses which allows the student to concentrate on particular art historical concerns or to investigate diverse issues within the discipline. Students can explore the multidisciplinary aspects of art history for graduate study and for future careers in a variety of fields including museums, galleries and libraries, conservation, education, journalism, and research. The Department of Art History offers major and minor programs, providing students with a solid foundation in the critical inquiries involved in a full understanding of the work of art and its context. Also available are the Major and Minor programs in Art History and Studio Art that balance studio work with art historical and theoretical studies, and the Major in Art History and Film Studies which examines art and film from related perspectives.

Programs

Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

66 BFA Major in Art History

6 ARTH 200⁶

3 ARTH 300³

6 Chosen from Group A

- 3 Group B: ARTH 360³, 361³, 362³
 - 3 Group B: ARTH 363³, 364³, 365³
 - 3 Group B: ARTH 366³, 367³, 368³
 - 3 Group B: Art History electives
 - 6 Chosen from Group C
 - 6 Chosen from Group D
 - 3 Chosen from Group E
 - *24 Chosen from at least three Groups in Art History
- *Students may substitute credits from the Faculty of Fine Arts for up to 12 credits in Art History.*

60 BFA Major in Art History and Film Studies

- 6 ARTH 200⁶ to be taken as first six credits in studies in Art History
- 3 Chosen from ARTH 353³, 354³
- 6 Chosen from ARTH 366³, 367³, 368³
- 3 Chosen from ARTH 370³, 371³, 372³, 373³, 374³, 375³, 376³
- 3 Chosen from ARTH 379³, 381³, 388³, 400³
- 3 Chosen from ARTH 383³, 384³, 385³, 386³, 387³, 389³, 391³, 392³
- 3 Art History electives
- 6 FMST 212⁶
- 6 Chosen from FMST 311³, 312³, 318³, 321⁶, 325³, 332³; VDEO 350⁶
- 6 Chosen from FMST 211⁶, 322⁶
- 3 Chosen from FMST 214³, 215³, 217³, 418³, 419³
- 3 Chosen from FMST 327³, 329³, 416³, 422³, 423³, 424³, 425³
- 3 Film Studies electives
- 3 ARTH 348³/FMST 348³
- 3 ARTH 448³/FMST 448³

60 BFA Major in Art History and Studio Art

- 6 ARTH 200⁶ to be taken as first six credits in studies in Art History
- 3 ARTH 300³
- 21 Art History electives
- 30 Studio Art electives

30 Minor in Art History

- 6 ARTH 200⁶ to be taken as first six credits in studies in Art History
- 3 ARTH 300³
- 21 Art History electives chosen from at least three of the Groups in Art History, in consultation with an assigned advisor

30 Minor in Art History and Studio Art

- 6 ARTH 200⁶ to be taken as first six credits in studies in Art History
- 3 ARTH 300³
- 6-9 Art History electives
- 12-15 Studio Art electives

Art History Co-operative Program

The Art History co-operative program is available to selected students who are enrolled in the BFA program and are majoring in Art History. The academic content of the co-op program is identical to the regular program with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. While it is hoped that most of the positions will be in the Montreal area, students must be prepared to work in other parts of Canada. Please see §24 for specific details concerning the curriculum.

81.50.1 Admission to Art History, Art History and Studio Art, and Art History and Film Studies Programs

There are no specific courses or procedures required for the Major and Minor in Art History and the Major in Art History and Film Studies other than the successful completion of a two-year pre-university Cegep program (or equivalent). In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Art History and Studio Art. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process. For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

Groups:

A — Media Based Studies

ARTH 262	Aspects of the History of Drawing (3 credits)
ARTH 263	Aspects of the History of the Print (3 credits)
ARTH 264	Aspects of the History of Ceramics (3 credits)
ARTH 265	Aspects of the History of Sculpture (3 credits)
ARTH 266	Aspects of the History of Fibre Art (3 credits)
ARTH 267	Aspects of the History of Photography (3 credits)
ARTH 348	Special Topics in Art and Film (3 credits)
ARTH 349	Studies in the History of the Print (3 credits)
ARTH 350	Studies in the History of Ceramics (3 credits)
ARTH 351	Studies in the History of Sculpture (3 credits)
ARTH 352	Studies in the History of Fibre Art (3 credits)
ARTH 353	Technology and Contemporary Art (3 credits)
ARTH 354	Studies in Interdisciplinarity in the Visual Arts (3 credits)
ARTH 355	Studies in Architecture (3 credits)
ARTH 356	Studies in the Materials and Processes of Art (3 credits)
ARTH 357	Studies in the History of Craft and the Decorative Arts (3 credits)
ARTH 358	Studies in the History of Media Art (3 credits)
ARTH 359	Studies in Contemporary Photographic Art (3 credits)
ARTH 448	Advanced Seminar in Art and Film (3 credits)

B — Period Studies

ARTH 270	Icons of Architectural History (3 credits)
ARTH 360	Studies in Ancient Greek Art and Architecture (3 credits)
ARTH 361	Studies in Ancient Roman Art and Architecture (3 credits)
ARTH 362	Studies in Early Christian and Byzantine Art and Architecture (3 credits)
ARTH 363	Studies in Medieval Art and Architecture (3 credits)
ARTH 364	Studies in Renaissance Art and Architecture (3 credits)
ARTH 365	Studies in 17th- and 18th-Century Art and Architecture (3 credits)
ARTH 366	Studies in 19th-Century Art and Architecture (3 credits)
ARTH 367	Studies in 20th-Century Art and Architecture (3 credits)
ARTH 368	Studies in Contemporary Art and Architecture (3 credits)
ARTH 369	Studies in Near Eastern Art and Architecture (3 credits)
ARTH 450	Advanced Seminar in the History of Art and Architecture (3 credits)
ARTH 498	Special Topics in the History of Art and Architecture (3 credits)

C — Art in Canada

ARTH 271	Introduction to Canadian Art (3 credits)
ARTH 272	From Realism to Abstraction in Canadian Art (3 credits)
ARTH 370	Studies in Canadian Art (3 credits)
ARTH 371	Studies in Canadian Architecture (3 credits)
ARTH 372	Issues in Contemporary Canadian Architecture (3 credits)
ARTH 373	Issues in Contemporary Canadian Art (3 credits)
ARTH 374	Architecture and Urbanism in Montreal (3 credits)
ARTH 375	Issues in the Montreal Art Milieu (3 credits)
ARTH 376	Topics in Amerindian and Inuit Art (3 credits)

D — Theory and Criticism

ARTH 200	Perspectives of Art History (6 credits)
ARTH 300	Art Historical Methods (3 credits)
ARTH 379	Postcolonial Theory in Art History (3 credits)
ARTH 380	Histories of Art History (3 credits)
ARTH 381	Feminism and Art History (3 credits)
ARTH 383	Art and Philosophy (3 credits)
ARTH 384	Theories of Representation (3 credits)
ARTH 385	Colour: Theory and Application in the Visual Arts (3 credits)

ARTH 386	Art and the Viewer (3 credits)
ARTH 387	Issues in Art and Criticism (3 credits)
ARTH 389	Issues in Ethnocultural Art Histories (3 credits)
ARTH 400	Advanced Seminar in Art Historical Method (3 credits)

E — Art and Society

ARTH 283	The Life and Work of ... (3 credits)
ARTH 290	Art History and Archaeology (3 credits)
ARTH 298	Special Topics in Genre Studies (3 credits)
ARTH 388	Narration and Art (3 credits)
ARTH 390	Art and the Museum (3 credits)
ARTH 391	Art and its Changing Contexts (3 credits)
ARTH 392	Gender Issues in Art and Art History (3 credits)
ARTH 396	Art and Culture (3 credits)
ARTH 398	Special Topics in Art and Society (3 credits)

F — Tutored Studies

ARTH 401	Independent Studies in Art History (3 credits)
ARTH 403	Studies in Art History Practice (3 credits)

Courses

ARTH 200 *Perspectives of Art History* (6 credits)
 A critical overview of the history of art and architecture and a selective examination of canonical figures, movements, periods, and thematic issues.
NOTE: Students who have received credit for ARTH 284 may not take this course for credit.

ARTH 262 *Aspects of the History of Drawing* (3 credits)
 A selective examination of drawing as an art form and of its relation to painting and other visual arts. *NOTE A/See §200.3*

ARTH 263 *Aspects of the History of the Print* (3 credits)
 A selective examination of the development and uses of the print. *NOTE A/See §200.3*

ARTH 264 *Aspects of the History of Ceramics* (3 credits)
 A selective examination of the development and uses of ceramics. *NOTE A/See §200.3*

ARTH 265 *Aspects of the History of Sculpture* (3 credits)
 A selective examination of the development and uses of sculpture.

ARTH 266 *Aspects of the History of Fibre Art* (3 credits)
 A selective examination of the development of fibre art. *NOTE A/See §200.3*

ARTH 267 *Aspects of the History of Photography* (3 credits)
 A selective examination of the development and uses of photography.
NOTE: Students who have received credit for PHOT 250 may not take this course for credit.

ARTH 270 *Icons of Architectural History* (3 credits)
 A study of key buildings and the vocabulary of architecture.

ARTH 271 *Introduction to Canadian Art* (3 credits)
 An introduction to selected subjects and themes in Quebec and Canadian art.
NOTE: This course may not be applied within any program offered in the Faculty of Fine Arts.
NOTE: Students who have received credit for ARTH 370 may not take this course for credit.

ARTH 272 *From Realism to Abstraction in Canadian Art* (3 credits)
 An introduction to ideas and techniques associated with the transition from representationalism to abstraction in 19th- and 20th-century Quebec and Canadian art.
NOTE: This course may not be applied within a BFA degree or any Fine Arts specialization, major, or minor program.

ARTH 283 *The Life and Work of ...* (3 credits)
 A critical examination of an artist's life and work.

ARTH 290 *Art History and Archaeology* (3 credits)

A selective examination of the relationship between art history and archaeology. *NOTE A/See §200.3*

ARTH 298 *Special Topics in Genre Studies* (3 credits)

Topics pertaining to categories of subject matter such as landscape, portraiture, and still life. *NOTE C/See §200.3*

ARTH 300 *Art Historical Methods* (3 credits)

Prerequisite: ARTH 200. An in-depth examination of the methods used in art history to analyze and interpret works of art.

ARTH 348 *Special Topics in Art and Film* (3 credits)

Prerequisite: Enrolment in the Major in Art History and Film Studies; ARTH 200 and FMST 212; or written permission of the program director. A comparative examination of some aspects of art history and film studies. *NOTE C/See §200.3*

NOTE: Students who have received credit for FMST 348 may not take this course for credit.

ARTH 349 *Studies in the History of the Print* (3 credits)

An examination of selected subjects in the history of the print.

ARTH 350 *Studies in the History of Ceramics* (3 credits)

An examination of selected subjects in the history of ceramics. *NOTE A/See §200.3*

ARTH 351 *Studies in the History of Sculpture* (3 credits)

An examination of selected subjects in the history of sculpture.

ARTH 352 *Studies in the History of Fibre Art* (3 credits)

An examination of selected subjects in the history of fibre art. *NOTE A/See §200.3*

ARTH 353 *Technology and Contemporary Art* (3 credits)

A selective examination of the relationship between technology and contemporary art.

ARTH 354 *Studies in Interdisciplinarity in the Visual Arts* (3 credits)

A selective examination of historical and contemporary art that utilizes a number of media.

ARTH 355 *Studies in Architecture* (3 credits)

An examination of the role and implications of selected materials and technology in architecture.

ARTH 356 *Studies in the Materials and Processes of Art* (3 credits)

An examination of selected historical and contemporary materials and processes of art.

ARTH 357 *Studies in the History of Craft and the Decorative Arts* (3 credits)

Selected subjects in the history of craft and the decorative arts as forms of material culture.

ARTH 358 *Studies in the History of Media Art* (3 credits)

A selective examination of new media art since the 1990s, including the historical development, thematic content, and conceptual strategies for such practices as video art, projection installation and performance, and experimental film.

ARTH 359 *Studies in Contemporary Photographic Art* (3 credits)

A selective examination of recent photographic art.

NOTE: Students who have received credit for PHOT 250 may not take this course for credit.

ARTH 360 *Studies in Ancient Greek Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of Ancient Greece. *NOTE A/See §200.3*

ARTH 361 *Studies in Ancient Roman Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of Ancient Rome. *NOTE A/See §200.3*

ARTH 362 *Studies in Early Christian and Byzantine Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of Early Christian and Byzantine cultures. *NOTE A/See §200.3*

ARTH 363 *Studies in Medieval Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of the Medieval period. *NOTE A/See §200.3*

ARTH 364 *Studies in Renaissance Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of 15th- and 16th-century Europe. *NOTE A/See §200.3*

ARTH 365 *Studies in 17th- and 18th-Century Art and Architecture* (3 credits)

Selected subjects in the art and architectural production of the 17th and 18th centuries. *NOTE A/See §200.3*

- ARTH 366 *Studies in 19th-Century Art and Architecture*** (3 credits)
Selected subjects in the art and architectural production of the 19th century. *NOTE A/See §200.3*
- ARTH 367 *Studies in 20th-Century Art and Architecture*** (3 credits)
Selected subjects in the art and architectural production of the 20th century. *NOTE A/See §200.3*
- ARTH 368 *Studies in Contemporary Art and Architecture*** (3 credits)
Selected subjects in contemporary art and architectural production. *NOTE A/See §200.3*
- ARTH 369 *Studies in Near Eastern Art and Architecture*** (3 credits)
Selected subjects in the art and architectural production of the Near East.
- ARTH 370 *Studies in Canadian Art*** (3 credits)
Selected subjects in the art of Canada. *NOTE A/See §200.3*
- ARTH 371 *Studies in Canadian Architecture*** (3 credits)
Selected subjects in the architecture of Canada. *NOTE A/See §200.3*
- ARTH 372 *Issues in Contemporary Canadian Architecture*** (3 credits)
A consideration of specific issues in the practice of recent architecture in Canada.
- ARTH 373 *Issues in Contemporary Canadian Art*** (3 credits)
A consideration of specific issues in the recent art of Canada. *NOTE A/See §200.3*
- ARTH 374 *Architecture and Urbanism in Montreal*** (3 credits)
The relationship of architecture to issues of urbanism, analyzed through examples from Montreal's past and/or present.
- ARTH 375 *Issues in the Montreal Art Milieu*** (3 credits)
An analysis of specific issues in the historical and/or contemporary Montreal art community.
- ARTH 376 *Topics in Amerindian and Inuit Art*** (3 credits)
A selective examination of the work of First Nations artists.
- ARTH 379 *Postcolonial Theory in Art History*** (3 credits)
Prerequisite: Six ARTH credits. A critical examination of the key concepts of postcolonial art and theory.
- ARTH 380 *Histories of Art History*** (3 credits)
Prerequisite: Six ARTH credits. The history of art history as a discipline and the concepts of history it uses.
- ARTH 381 *Feminism and Art History*** (3 credits)
Prerequisite: Six ARTH credits. A consideration of feminism in art history.
- ARTH 383 *Art and Philosophy*** (3 credits)
Prerequisite: Six ARTH credits. A consideration of the relationship between philosophy, art theory and practice.
- ARTH 384 *Theories of Representation*** (3 credits)
Prerequisite: Six ARTH credits. An examination of the different concepts of representation involved in creating, defining, and interpreting an artwork.
- ARTH 385 *Colour: Theory and Application in the Visual Arts*** (3 credits)
An examination of various theories of colour by artists, philosophers, psychologists, and scientists.
NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.
- ARTH 386 *Art and the Viewer*** (3 credits)
Prerequisite: Six ARTH credits. A consideration of the relationships between artwork and audience.
- ARTH 387 *Issues in Art and Criticism*** (3 credits)
Prerequisite: Six ARTH credits. An examination of selected aspects of the relationship between art, aesthetics, and critical writing.
NOTE A/See §200.3
- ARTH 388 *Narration and Art*** (3 credits)
Prerequisite: Six ARTH credits. A critical examination of selected aspects of the relationship between art and its narratives.
NOTE A/See §200.3
- ARTH 389 *Issues in Ethnocultural Art Histories*** (3 credits)
Prerequisite: Six ARTH credits. An analysis of the concepts of ethnic and cultural identity in art and art history.

ARTH 390 *Art and the Museum* (3 credits)

A study of selected issues in museums and related art institutions.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 391 *Art and its Changing Contexts* (3 credits)

Prerequisite: Six ARTH credits. An investigation of art in its original context and of its changing meanings and uses through time.

ARTH 392 *Gender Issues in Art and Art History* (3 credits)

An examination of gender as a factor in making and interpreting art.

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 396 *Art and Culture* (3 credits)

Prerequisite: Six ARTH credits. A critical examination of selected issues in art and its cultural context.

ARTH 398 *Special Topics in Art and Society* (3 credits)

A detailed examination of a selected aspect of art in society. *NOTE C/See §200.3*

NOTE: It is strongly recommended that students follow at least six credits in Art History courses before enrolling in this course.

ARTH 400 *Advanced Seminar in Art Historical Method* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History and written permission of the Department of Art History. A detailed examination of selected aspects of art methodologies. *NOTE A/See §200.3*

**Fewer than 33 credits remaining in degree program.*

ARTH 401 *Independent Studies in Art History* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History, and written permission of the Department of Art History. Students are required to prepare a research paper under the supervision of a faculty member. *NOTE A/See §200.3*

**Fewer than 33 credits remaining in degree program.*

ARTH 403 *Studies in Art History Practice* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History, and written permission of the Department of Art History. A course in the practice of art history. Students are required to work on specific projects under the supervision of a faculty member.

**Fewer than 33 credits remaining in degree program.*

ARTH 448 *Advanced Seminar in Art and Film* (3 credits)

Prerequisite: Enrolment in the Major in Art History and Film Studies; ARTH 348 or FMST 348; or written permission of the program director. A seminar designed to permit an in-depth course of study on some aspects of art and film history. *NOTE A/See §200.3*

NOTE: Students who have received credit for FMST 448 may not take this course for credit.

ARTH 450 *Advanced Seminar in the History of Art and Architecture* (3 credits)

Prerequisite: Third-year* standing in the Major in Art History, and written permission of the Department of Art History. A detailed examination of selected aspects of art and architectural history. *NOTE A/See §200.3*

**Fewer than 33 credits remaining in degree program.*

ARTH 498 *Special Topics in the History of Art and Architecture* (3 credits)

Prerequisite: 18 credits in Art History, or written permission of the Department of Art History. A course for advanced students which provides for the study of more specialized areas of art. *NOTE A/See §200.3*

Faculty

Chair

DANIEL CROSS, MFA C'dia., Associate Professor

Professors

RICHARD KERR, Dip Media Arts Sheridan Coll.

JOHN LOCKE, MA N.Y.

MARIELLE NITOSLAWSKA, MFA Nat'l. Film Sch., Lodz, Poland

PETER RIST, PhD N.Y.

CATHERINE RUSSELL, PhD N.Y.

THOMAS WAUGH, PhD Col., Concordia Research Chair

Associate Professors

JEAN-CLAUDE BUSTROS, BFA C'dia.

LUCA CAMINATI, PhD Wis.(Madison)

ROY CROSS, MFA C'dia.

KAY DICKINSON, PhD Sus.

GUYLAINE DIONNE, PhD Stras.

LOUISE LAMARRE, Cert Études Cinématog. Laval

MARTIN LEFEBVRE, PhD U.Q.A.M., Concordia Research Chair

ERIN MANNING, PhD Car., PhD Hawaii, Concordia Research Chair

ROSANNA MAULE, PhD Iowa

CILIA SAWADOGO, BA C'dia.

HAIDEE WASSON, PhD McG.

Assistant Professors

SHIRAAVNI, MFA Art Inst. Chic.

MASHA SALAZKINA, PhD Yale, Concordia Research Chair

MARC STEINBERG, PhD Brown

Lecturer

LUIGI ALLEMANO, BFA Emily Carr

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Faubourg Tower, Room: FB 319

514-848-2424, ext. 4666

Department Objectives

The School investigates and develops cinema as a means of artistic expression. Its programs aim to graduate filmmakers, film animators, and scholars who have a rich appreciation of the artistic and cultural potential of the medium, and also of its history and traditions. Students are exposed to the possibilities of both digital and analog technologies, and the School's scholarly and artistic community celebrates its celluloid heritage and participates in the construction of the cinema of the future.

School programs, always evolving, embrace diversity, both in artistic formats and in the cultural values espoused through the study, creation, and dissemination of the cinema. The work of teachers, students, and artists engages with other artistic disciplines, and is grounded on academic rigour, teaching excellence, creative vision, and specific and high standards for the recruitment and admission of students, both undergraduate and graduate, who fit the School's mission. Its mission is inseparable from its commitment to the relevance and responsibility of its activities to the community, understood as being rooted here in Montreal and Quebec, throughout Canada, and internationally.

All programs offer core courses, elective courses, lectures by visiting specialists, independent studies, and professional internships, assuring continuous contact with working professionals in the arts community. Research and creative practice by faculty are also an essential part of the School's mission.

The BFA in Film Studies prepares graduates for professions as critics, arts administrators, educators, archivists, and curators within the regional, national, and international communities.

The BFA Film Animation and the BFA Film Production are studio programs that address practical and creative aspects of filmmaking, with the goal of providing a solid foundation for research and discovery to facilitate students' articulation of their unique artistic personality. Film Animation programs teach the full process of frame-by-frame filmmaking, its theory, and its practice. Film Production programs instill a thorough knowledge of the mechanics involved in producing motion pictures and help students develop personal perspectives on the aesthetics of creation. Students make their own films.

Programs

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

66 BFA Specialization in Film Production

NOTE: It is strongly recommended that students in the Specialization in Film Production have, or acquire, a knowledge of French.

- *12 FMST 211⁶, 212⁶
- 18 FMPR 231⁶, 332⁶, 432⁶
- 12 FMPR 336³, 338³, 339³, 340³
- 9 Chosen from FMPR 335³, 341³, 343³, 350³, 398³, 435³, 438³, 439³, 440³, 441³, 442³, 450³, 498³
- 9 Film Studies electives** (excluding FMST 200)
- 6 Cinema electives** **** or credits outside of Cinema selected in consultation with the head of Film Production

66 BFA Specialization in Film Studies

NOTE: It is strongly recommended that students in the Specialization in Film Studies have, or acquire, a knowledge of French.

- *24 FMST 211⁶, 212⁶, 321⁶, 322⁶
- 6 Chosen from FMST 214³, 215³, 418³, 419^{3***}
- 6 FMPR 231⁶ or Cinema electives**** approved by the head of Film Studies
- 3 FMST 450³
- 21 Film Studies electives** (excluding FMST 200); FMPR 341³, 441³
- 6 Film Studies seminar credits chosen in consultation with an advisor

54 BFA Major in Film Production

- *12 FMST 211⁶, 212⁶
- 21 FMPR 231⁶, 332⁶, 338³, 339³, 340³
- 6 Film Studies elective(s)** (excluding FMST 200)
- 15 Cinema electives** ****

60 BFA Major in Film Animation

- 18 FMAN 202⁶, 224⁶, 254⁶
- 9 FMST 212⁶, 323³
- 12 FMAN 305⁶ and six credits of Film Animation electives
- 6 FMAN 315³, 319³
- 9 FMAN 402⁹
- 3 Cinema electives****
- 3 Fine Arts electives (exclusive of Cinema)

NOTE: FMAN 402 may not be taken as a Cinema elective.

48 BFA Major in Film Studies

- *24 FMST 211⁶, 212⁶, 321⁶, 322⁶
- 18 Film Studies electives** (excluding FMST 200)
- 6 Cinema electives** ****

60 BFA Major in Art History and Film Studies

- 6 FMST 212⁶
- 6 Chosen from FMST 311³, 312³, 318³, 321⁶, 325³, 332³; VDEO 350⁶
- 6 Chosen from FMST 211⁶, 322⁶
- 3 Chosen from FMST 214³, 215³, 217³, 418³, 419³
- 3 Chosen from FMST 327³, 329³, 416³, 422³, 423³, 424³, 425³
- 3 Film Studies electives
- 6 ARTH 200⁶ to be taken as first six credits in studies in Art History
- 3 Chosen from ARTH 353³, 354³
- 6 Chosen from ARTH 366³, 367³, 368³

- 3 Chosen from ARTH 370³, 371³, 372³, 373³, 374³, 375³, 376³
- 3 Chosen from ARTH 379³, 381³, 388³, 400³
- 3 Chosen from ARTH 383³, 384³, 385³, 386³, 387³, 389³, 391³, 392³
- 3 Art History electives
- 3 FMST 348³/ARTH 348³
- 3 FMST 448³/ARTH 448³

This is a program for students who want to examine art and film from a variety of social, cultural, political, and critical perspectives.

30 Minor in Cinema

- 12 FMST 211⁶, 212⁶
- 18 Film Studies electives** (With the written permission of the School, introductory-level Film Animation or Film Production courses, selected in consultation with the School, may be substituted.)

30 Minor in Film Animation

- 12 FMAN 202⁶, 224⁶
- 6 FMAN 254⁶
- 9 FMST 212⁶, 323³
- 3 Cinema electives

24 Minor in Film Studies

- 12 Chosen from FMST 200⁶, 211⁶, 212⁶
- 12 Film Studies electives**

This minor is primarily intended for students outside the Faculty of Fine Arts. Students in Communication Studies Department degree programs must have written permission of their Department to enter this program.

NOTES:

**FMST 211 and 212 should be taken as part of the first 30 credits.*

***In the Major and Specialization in Film Production, and the Major and Specialization in Film Studies, up to 12 credits chosen from the following courses in the Faculty of Arts and Science may be applied as Film Studies or Cinema electives for degree purposes: Communication Studies listed in §81.60.3; Littérature FLIT 382. In the Minor in Cinema and the Minor in Film Studies, up to six credits chosen from the following courses in the Faculty of Arts and Science may be applied as Film Studies elective(s) for degree purposes: Communication Studies listed in §81.60.3; Littérature FLIT 382.*

****Communication Studies 303 may be substituted for three credits in Film Studies and must be considered as Film Studies credits for degree purposes.*

*****In the Specialization in Film Production, the Specialization in Film Studies, and all Cinema major programs, the following course may be applied as Cinema electives for degree purposes: VDEO 350.*

Minor in Interdisciplinary Studies in Sexuality

See §81.60.4

81.60.1 Admission to Cinema Programs

For programs in Film Animation and Film Production, the Mel Hoppenheim School of Cinema has distinct admission procedures in addition to the normal admission process of Concordia University. While applicants are required to submit a *portfolio* and a *letter of intent*, an *interview* may also be required.

In order to allow themselves sufficient preparatory time, applicants are strongly urged to contact the School of Cinema or its website at cinema.concordia.ca to obtain important information regarding portfolio submissions and deadline dates. An Admissions Evaluation form will be completed by the applicant at the time of submission of the portfolio. A completed Admissions Evaluation form must accompany every application. Applicants who do not expect to bring their dossiers in personally must contact the School to request a copy of the Admissions Evaluation form, or download it from the web. There are no additional requirements for admission to Film Studies.

NOTE: The Specialization in Film Production is offered at the third-year level. Students taking FMPP 332, in the Major in Film Production, may apply for transfer to the Specialization in Film Production by March 1.

Courses

Film Studies:

NOTE: Courses may occasionally be offered in French.

FMST 200 Introduction to Film Studies (6 credits)

A survey acquainting the student with the art of the film. The technical and critical terminology of film studies is discussed. Popular literature on film, such as reviews, is analyzed and the more specialized film literature is introduced. Directors whose films are usually viewed include Bergman, Eisenstein, Fellini, Ford, Hitchcock, Kurosawa, Lubitsch, Keaton, and Welles. Weekly screenings.

NOTE A/See §200.3

FMST 211* History of Film to 1959 (6 credits)

The evolution of the forms and themes of world cinema from its origin to 1959, in relation to its cultural, social, and political contexts. Special emphasis is placed on film historical methodology, focusing on approaches based on genre, auteur, national cinemas, social history, particular cinematic modes, or other frameworks. Weekly screenings. *NOTE A/See §200.3*

**Students in Cinema programs who require FMST 211 should complete the course as part of their first 30 credits.*

FMST 211* L'histoire du cinéma jusqu'à 1959 (6 crédits)

Ce cours couvre l'évolution des formes et des thématiques cinématographiques depuis leur début jusqu'à 1959 et les place dans leur contexte culturel, social et politique. L'accent est mis principalement sur la méthodologie de l'histoire du cinéma tout en privilégiant plusieurs angles d'approche: genre, cinéma d'auteur, cinéma national, histoire sociale, forme cinématographique particulière ou d'autres grilles. Visionnements hebdomadaires. *NOTE A/Voir §200.3*

**Si ce cours figure au programme d'une personne inscrite en Cinéma, il devrait faire partie des 30 premiers crédits.*

FMST 212* Film Aesthetics (6 credits)

A study of the aesthetics of film. Topics include film criticism, theories about the fundamental elements of film, and comparisons between films which do not depend on their date of production. Problems of film description, interpretation, and evaluation are discussed. Weekly screenings. *NOTE A/See §200.3*

**Students in Cinema programs who require FMST 212 should complete the course as part of their first 30 credits.*

FMST 214 English-Canadian Film (3 credits)

A survey of English-Canadian film from the earliest surviving works to the present. Topics include fictional, documentary, animated, and experimental film, and the role of the National Film Board is discussed. Weekly screenings. *NOTE A/See §200.3*

FMST 215 Le cinéma québécois (3 crédits)

Tour d'horizon du cinéma québécois mettant l'accent sur des œuvres contemporaines. Les films sont examinés en fonction de leur valeur culturelle et politique. On y traite également de la structure de l'industrie du cinéma au Québec et du rôle joué, entre autres, par l'Office national du film. Visionnements hebdomadaires. *NOTE A/Voir §200.3*

NOTE: Ce cours peut, à l'occasion, être offert en anglais. / Course may occasionally be taught in English.

FMST 217 First Nations and Film (3 credits)

A survey of representation by and of aboriginal peoples in film and video. The emphasis is on the Americas, but important works from other continents are included. Films and videotapes, both mainstream and experimental, are discussed in the context of contemporary aesthetic issues, socio-cultural history, and post-colonial theory. Weekly screenings.

NOTE: Students who have received credit for FMST 398H may not take this course for credit.

FMST 311 Montage Aesthetic (3 credits)

Prerequisite: FMST 212. An intensive study of montage as an element of film style. Beginning with the work of D.W. Griffith, developments in film editing are followed through French Avant-Garde and Russian films of the 1920s to contemporary film. Weekly screenings.

FMST 312 Moving Camera Aesthetic (3 credits)

Prerequisite: FMST 212. An intensive study of camera movement as an element of film style. Consideration is given to relations between long takes, deep-focus cinematography, and camera movement, as well as to the role of camera movement in creating the signification of film. Films by Murnau, Renoir, Welles, Ophuls, and Snow are included among those viewed and discussed. Weekly screenings.

FMST 313 Film Comedy I (3 credits)

Prerequisite: Second-year standing.* An introduction to film comedy in the silent and sound eras. The visual and verbal sources of comedy are analyzed through the study of films ranging from Mack Sennett and Buster Keaton to Woody Allen and Jacques Tati. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 315 Topics in Film Theory (3 credits)

Prerequisite: Second-year standing.* This course closely examines a variety of theoretical writings concerned with aesthetic, social, and psychological aspects of the cinema. Students study the writing of classical theorists such as Eisenstein, Bazin, Balázs, and Kracauer, and/or contemporary thinkers such as Metz, Mulvey, Bordwell, and Jameson. Questions addressed in the course may include the nature of cinematic representation, film language, the relationship of film to other forms of cultural expression, and to racial and gender identity. The specific topics vary from year to year according to the specialization of the instructor. Screenings of films and film clips are included in the course.

NOTE: Students who have received credit for this topic under a FMST 398 number may not take this course for credit.

**66 or fewer credits remaining in degree program.*

FMST 318 Experimental Film (3 credits)

Prerequisite: Second-year standing.* An examination of experimental film emphasizing developments from the late 1940s to the present. The New American Cinema is considered in relation to other North American and European experimental cinemas, and examples of the historical antecedents of recent experimental films are viewed and discussed. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 321 *Studies in Film Directors* (6 credits)

Prerequisite: FMST 211 or second-year standing.* A concentrated study of the work of several major directors, principally narrative, from different periods in film history. Each director's work is examined in detail with representative films from distinct periods. The films are considered in terms of thematic and stylistic consistency and variation as well as biographical, social, and political factors. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 322 *History of Film since 1959* (6 credits)

Prerequisite: FMST 211 or second-year standing.* A cross-cultural historical examination of selected aspects of world cinema since 1959, including trends in documentary and experimental film. The principal focus on European and American cinema is contextualized through reference to Canadian, Japanese, and Third World film. A range of perspectives is introduced, including genre and auteur study, formal analysis, and feminist analysis. Films are studied in their political and cultural contexts. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 323 *History of Animated Film* (3 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation, or second-year standing.* A survey of animated film from the first decade of the 20th century to the present. Styles of animation ranging from abstract experimental film of the 1920s, to the Disney Studio, to computer animation are viewed and discussed. The contribution of the National Film Board of Canada and particularly that of Norman McLaren is considered. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 325 *Film Acting* (3 credits)

Prerequisite: Second-year standing.* A study of film acting centred on examining performances and individual scenes from films. Among the issues studied are the creation of star personas, casting against type, the influence of the script in the performance, the use of improvisation, the gesture system in silent film acting, ensemble acting, stylization, and exaggeration. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 326 *Approaches to World Cinema* (3 credits)

Prerequisite: Second-year standing.* The course investigates films, film movements, filmmakers and film industries worldwide focusing on transnationalism as well as specific geopolitical cultural contexts. Among the possible topics: contemporary global art cinema and festivals, global and regional economies of film and media, film movements and genres, transcultural and diasporic cinemas, Third Cinema, postcoloniality and eurocentrism, international co-productions, practices of dubbing and subtitling.

**66 or fewer credits remaining in degree program.*

FMST 327 *Third World Film* (3 credits)

Prerequisite: Second-year standing.* A survey of Third World films seen in relation to their cultural, political, and aesthetic environment. Films are selected from areas such as Latin America, the Caribbean, Africa, the Middle East, South and East Asia. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 328 *Non-fiction Film Since 1956* (3 credits)

Prerequisite: Second-year standing.* A cross-cultural survey of contemporary developments in the documentary film. The course begins with the precursors of *cinéma-direct* in North America and Europe during the 1950s, and extends through the most recent applications of *cinéma-direct* in the emerging cinemas of the Third World. Emphasis is placed on both the artistic achievement and the theoretical, cultural, and political context of the non-fiction film during this period of technological and aesthetic transition. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 329 *Women and Film* (3 credits)

Prerequisite: FMST 211 or second-year standing.* An examination of films made by women, film criticism written by women, and the portrayal of women in films. These topics are considered within the context of film history and with an emphasis on their relation to ideas in contemporary feminist theory. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 332 *Issues in Independent Cinema* (3 credits)

Prerequisite: FMST 211 or second-year standing.* An intensive study of selected tendencies in cinema produced outside the mainstream of the film industry. Topics may include documentary, video art, experimental or narrative film, or particular convergences of these modes of film practice. Topics will vary according to the instructor's specialization. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

NOTE: Students who have received credit for FMST 331 may not take this course for credit without permission from the School.

FMST 335 *Aspects of National Cinemas* (3 credits)

Prerequisite: Second-year standing.* An examination of films as reflections of national cultures. Films by a range of directors representing one or several national groupings such as Japan, Brazil, Eastern Europe, Great Britain, or contemporary West Germany are discussed in the context of their aesthetic, cultural, and political aspirations. Weekly screenings. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 336 Documentary Film of the Classical Period (3 credits)

Prerequisite: Second-year standing. This course is a cross-cultural survey of the history of the documentary film from its origins in early cinema to the emergence of direct cinema in the postwar period. Emphasis is placed on both the artistic achievement and the theoretical, cultural, and political context of nonfiction film during the first half of the 20th century. Directors studied may include Flaherty, Grierson, Lorentz, Ivens, Riefenstahl, Shub, Vertov, and Vigo.

**66 or fewer credits remaining in degree program.*

FMST 337 Topics in American Cinema (3 credits)

Prerequisite: Second-year standing. * A lecture or seminar course which provides an opportunity for the study of limited and more specialized aspects of U.S. cinema. Topics may include individual genres, directors, production studios, historical periods, or aspects of independent cinema. Topics vary from year to year according to the instructor's field of specialization.

**66 or fewer credits remaining in degree program.*

FMST 348 Special Topics in Art and Film (3 credits)

Prerequisite: Enrolment in the Major in Art History and Film Studies; ARTH 200 and FMST 212; or written permission of the program director. A comparative examination of some aspects of film studies and art history. *NOTE C/See §200.3*

NOTE: Students who have received credit for ARTH 348 may not take this course for credit.

FMST 350 Studies in Film Genres (3 credits)

Prerequisite: Second-year standing*; FMST 211 or 322. An intensive analysis of one or two film genres, which assumes previous experience in film-genre studies. The genre is discussed in terms of its structural characteristics and the ways in which it is a product of specific social situations. Weekly screenings.

**66 or fewer credits remaining in degree program.*

FMST 391 Sexual Representation in Cinema (3 credits)

Prerequisite: Second-year standing* or six credits in the Minor in Interdisciplinary Studies in Sexuality. An investigation of cinematic sexual imagery as art, communication and socio-cultural phenomenon. Weekly screenings of films and videos, representing fiction, experimental and documentary genres, as well as different historical and cultural contexts, are related to theoretical readings, both classical and contemporary, by authors from Freud and the Surrealists to Foucault and recent feminist and queer theorists. Contemporary issues such as pornography, autobiography, and the HIV epidemic are confronted. Learning is interdisciplinary, interactive and group-oriented.

**66 or fewer credits remaining in degree program.*

NOTE: Students who have received credit for this topic under a FMST 498 number may not take this course for credit.

FMST 392 Representation and Sexuality: Queer Cinema I (3 credits)

An interdisciplinary, cross-cultural survey of queer cinema and video. Selected phases in the historical trajectory of lesbian and gay film are highlighted, both underground and mainstream, including studies of representative major artists from Jean Cocteau and Dorothy Arzner to Patricia Rozema and Derek Jarman. Problems in the depiction of sexual minorities are analyzed, and a selection of the principal aesthetic, theoretical and socio-political issues raised by queer theory and cultural production is introduced. *NOTE A/See §200.3*

FMST 393 Representation and Sexuality: Queer Cinema II (3 credits)

Prerequisite: FMST 392. An extension of FMST 392. An in-depth focus on selected historical, aesthetic, and theoretical issues, which vary from year to year according to the expertise of faculty. *NOTE A/See §200.3*

FMST 398 Special Topics in Film Studies (3 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of limited and more specialized aspects of film studies. *NOTE C/See §200.3*

FMST 399 Special Topics in Film Studies (6 credits)

Prerequisite: Written permission of the School of Cinema. A course which provides an opportunity for the study of specialized aspects of film studies outside the scope of existing courses. *NOTE C/See §200.3*

FMST 409 Seminar in Women and Film (3 credits)

Prerequisite: Written permission of the School of Cinema. An advanced course in the study of films made by women, as well as of the representation of women in films. The topics selected for study may vary from year to year and are considered within the context of film history, contemporary feminist philosophy, and feminist film theory. Students are expected to conduct independent research for class presentation. *NOTE A/See §200.3*

FMST 414 Seminar in Film Directors (3 credits)

Prerequisite: 18 credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for more concentrated study of the work of specific film directors. The director or directors whose films are chosen for study varies from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST 416 Seminar in Film History (3 credits)

Prerequisite: 18 credits in Film Studies and written permission of the School of Cinema. A seminar for advanced students which provides for the study of limited and more specialized areas of film history. The areas chosen for study vary from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST 418 Seminar in English-Canadian Film (3 credits)

Prerequisite: FMST 214 or COMS 316, and written permission of the School of Cinema. A seminar in which selected aspects of English-Canadian film are examined and discussed. The areas chosen for study vary from year to year according to the instructor's field of specialization.

FMST 419 Séminaire sur le cinéma québécois (3 crédits)

Préalable: FMST 215 ou COMS 316, ainsi que permission écrite de l'École de cinéma. Un séminaire dans lequel des aspects sélectifs du cinéma québécois sont analysés et discutés. Les sujets d'étude choisis varient d'année en année selon la spécialisation de l'instructeur.

FMST 421 Seminar in Film Script Analysis (3 credits)

Prerequisite: Written permission of the School of Cinema. A study of the film script both as a basis for the construction of a film and as literature in its own right. Film scripts serving as illustrations of a variety of issues are used. Among these are point-of-view, voice-over, adaptation from novel and theatre to film, character development, multi-story narratives, and uses of dialogue. Several scripts by the same screenwriter are examined, as well as different drafts of the same script. The course requirement includes an oral presentation to be given in conjunction with one or more students in the class.

NOTE: Students who have received credit for FMST 324 may not take this course for credit.

FMST 422 Seminar in Film Theory and Criticism (3 credits)

Prerequisite: FMST 212 and written permission of the School of Cinema. Theories including those of Sergei Eisenstein and André Bazin are studied both as explanations of the effects of films and as foundations for film criticism. The relation of contemporary theoretical writings, such as those in film semiology, to film criticism is discussed. Weekly screenings.

FMST 423 Seminar in Comparative Stylistic and Formal Analysis (3 credits)

Prerequisite: Written permission of the School of Cinema. An intensive course in the analysis of film style. Films are examined using an analytical projector in order to discover their formal and thematic structures. The contribution of cinematographers, editors, scriptwriters, directors, and performers to the development of a style are discussed. Weekly screenings.

FMST 424 Seminar in Film Narrative (3 credits)

Prerequisite: Written permission of the School of Cinema. An examination of conventions of film narrative from a theoretical and historical point of view. Innovations in narrative structure are discussed and consideration is given to the origin, development, and transformation of narrative traditions in their cultural and aesthetic context.

FMST 425 Seminar in Contemporary Film Theory (3 credits)

Prerequisite: Written permission of the School of Cinema. A survey and analysis of major recent theoretical approaches to film. Among the topics discussed are auteurism, semiotics, textual analysis, ideological criticism, psychoanalysis, feminism, and neo-formalism. The seminar includes screenings, discussions of weekly readings, and oral presentations by the students.

NOTE A/See §200.3

FMST 426 Professional Internship I (3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A Film Studies student who has been commissioned to work in such areas as film research, archival work, editing film publications, or writing film criticism, may seek permission to apply three credits towards the Film Studies degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 427 Professional Internship II (3 credits)

Prerequisite: Second-year standing* in the Major in Film Studies or the Specialization in Film Studies; written permission of the School of Cinema. A student repeating FMST 426 registers for credit under FMST 427. *NOTE A/See §200.3*

**66 or fewer credits remaining in degree program.*

FMST 428 Independent Study I (3 credits)

Prerequisite: 24 credits completed in Film Studies; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings.

FMST 429 Independent Studies II (3 credits)

Prerequisite: FMST 428; 24 credits completed in Film Studies; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings.

FMST 448 *Advanced Seminar in Art and Film* (3 credits)

Prerequisite: Enrolment in the Major in Art History and Film Studies; ARTH 348 or FMST 348; or written permission of the program director. A seminar designed to permit an in-depth course of study on some aspects of art and film history. *NOTE A/See §200.3*
NOTE: Students who have received credit for ARTH 448 may not take this course for credit.

FMST 450 *Film Studies Specialization Seminar* (3 credits)

Prerequisite: Second-year standing* in the Specialization in Film Studies; written permission of the School of Cinema. This intensive seminar includes workshops in research methodology, in advanced study and career planning, and in the practice of criticism, publication, preservation, and programming. The relation of film studies to filmmaking practice, the role of changing technology, and the current cultural context of the discipline are discussed by visiting experts from both within the University and the community at large. The course brings together all students in the Specialization in Film Studies.

**66 or fewer credits remaining in degree program.*

FMST 498 *Special Topics in Film Studies* (3 credits)

Prerequisite: Written permission of the School of Cinema. A lecture or seminar course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film studies. *NOTE A, C/See §200.3*

Film Animation:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2

FMAN 202 *Animation I* (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; FMAN 254 concurrently; or written permission of the School of Cinema, with either FMPR 231 or six credits in a Studio Art course. A studio course introducing the study and practice of film animation. Students are taught the fundamentals of motion analysis and frame-by-frame filmmaking, basic character animation, camera layouts, exposure sheets and character design. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMAN 224 *Analytical Drawing and Design for Animated Filmmaking* (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation; or written permission of the School of Cinema, with either FMPR 231 or six credits in Studio Art. An analytical approach to various elements supporting the concept of representation, including character design, virtual space, and perception, among others. The concept of drawing is expanded beyond observational drawing.

NOTE: Students who have received credit for FMAN 324 may not take this course for credit.

FMAN 254 *Technical Aspects of Animated Filmmaking* (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation, FMAN 202 concurrently; or written permission of the School of Cinema. A studio course introducing students to the use of digital and analog equipment in the production of frame-by-frame films. Students learn the technical aspects of animation software and analog animation production equipment.

NOTE: Students who have received credit for FMAN 214 may not take this course for credit.

FMAN 305 *Animation II* (6 credits)

Prerequisite: Enrolment in the Major in Film Animation; FMAN 202, 224, 254. A continuation on a more advanced level of FMAN 202. During the production of short animation exercises and films, students enhance their knowledge of film planning strategies and various frame-by-frame filmmaking techniques. Students explore film language, sound design and editing.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMAN 302, 303, 304, 306, or 314 may not take this course for credit.

FMAN 315 *From Idea to Storyboard* (3 credits)

Prerequisite: FMAN 305 previously or concurrently. It is recommended that students take FMAN 319 concurrently. Exploration of the visual and written development of ideas and scripts in a storyboard form. Students engage in creative and experimental exercises, including timing, planning the soundtrack, and creating animatics.

FMAN 319 *Character Animation* (3 credits)

Prerequisite: FMAN 305 previously or concurrently. It is recommended that students take FMAN 315 concurrently. An examination of the fundamentals of character animation, its theory, techniques, and application to studio situations. Exercises in character design and dramatization are directed towards the students' particular interests and styles. *NOTE A/See §200.3*

NOTE: Previous drawing experience is recommended.

FMAN 325 *Advanced Analytical Drawing* (3 credits)

Prerequisite: FMAN 202, 224. A continuation on a more advanced level of FMAN 224.

FMAN 340 *Sound for Animated Film* (3 credits)

Prerequisite: FMAN 202; or written permission of the School of Cinema. An introduction to the creation of sounds, simple music and theme composition as well as sound effects for the soundtrack of the animated film.

NOTE: Students who have received credit for this topic under a FMAN 398 number may not take this course for credit.

FMAN 352 Stop-Motion Animation (3 credits)

Prerequisite: FMAN 202; or written permission of the School of Cinema. An intensive hands-on seminar/workshop in the art and craft of animation. This course is designed to acquaint the student with photographic techniques, model, puppet, and set construction, materials, motion control, and lighting, as it applies to animation filmmaking. Recent developments and a study of international styles and techniques are included.

NOTE: Students who have received credit for this topic under a FMAN 498 number may not take this course for credit.

FMAN 353 Principles of 3D Digital Film Animation (3 credits)

Prerequisite: FMAN 202 previously or concurrently; or written permission of the School of Cinema. An introduction to the principles and practices of the 3D digital approach to frame-by-frame filmmaking.

NOTE: Students who have received credit for FMAN 354 may not take this course for credit.

FMAN 354 3D Digital Animated Filmmaking (6 credits)

Prerequisite: Enrolment in the Major in Film Animation or the Minor in Film Animation, and FMAN 202, 224, 254; or written permission of the School of Cinema. An intensive technical course in the art and creation of 3D computer graphics. Students learn to use 3D software and related applications for modelling, rigging, lighting, and texture. Students are encouraged to explore the aesthetic combinations of digital 3D, 2D, and other animation techniques in exercises and projects.

NOTE: Students who have received credit for FMAN 353 may not take this course for credit.

FMAN 398 Special Topics in Film Animation (3 credits)

Prerequisite: Written permission of the School of Cinema. An opportunity for study of limited and more specialized aspects of film animation. *NOTE C/See §200.3*

NOTE: Students are required to bear the cost of materials.

FMAN 402 Animation III (9 credits)

Prerequisite: Enrolment in the Major in Film Animation; FMST 212, 323; FMAN 305, 315, 319. A continuation on a more advanced level of Animation II. Students produce a major animated film project using the medium of their choice. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMAN 403 may not take this course for credit.

FMAN 436 Digital Post-Production for Animation (3 credits)

Prerequisite: FMAN 305 previously or concurrently; or written permission of the School of Cinema. This course is both technical and aesthetically oriented, designed to develop an understanding of montage in terms of pacing, rhythm, transitions, and continuity. Working on a series of exercises, students are introduced to the digital postproduction process in film and animation. Topics include such elements as video signals, digital video formats, colour correction, codecs, and compression.

NOTE: Students who have received credit for FMAN 336 may not take this course for credit.

FMAN 437 Animated Special Effects (3 credits)

Prerequisite: FMAN 352 or 353 or 354; or written permission of the School of Cinema. Through a series of short exercises, students are introduced to the art of special effects creation, learning digital animated effects and practical special effects.

FMAN 446 Professional Internship I (3 credits)

Prerequisite: FMAN 202, 224, 254; written permission of the School of Cinema. A Film Animation student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Animation degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member.

FMAN 447 Professional Internship II (3 credits)

Prerequisite: Written permission of the School of Cinema. A student who has received credit for FMAN 446 and wishes to do a second professional internship registers for FMAN 447.

FMAN 448 Independent Study I (3 credits)

Prerequisite: 24 credits completed in Film Animation; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings. *NOTE A,C/See §200.3*

FMAN 449 Independent Study II (3 credits)

Prerequisite: FMAN 448; 24 credits completed in Film Animation; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings. *NOTE A/See §200.3*

FMAN 498 Special Topics in Film Animation (3 credits)

Prerequisite: Written permission of the School of Cinema. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film animation. *NOTE A,C/See §200.3*

Film Production:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.60.2.

FMPR 231 *Filmmaking I* (6 credits)

Prerequisite: Enrolment in the Major in Film Production; or enrolment in the Specialization in Film Studies and written permission of the School of Cinema. A comprehensive course introducing students to the art of making films. This course stresses the individual student's creative efforts in filmmaking. Students are expected to master basic technique and theory. Students will also be using digital post-production systems to edit their works. The course requires attendance at mandatory workshops outside of class time. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMPR 332 *Filmmaking II* (6 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMST 211, 212; FMPR 338 and 340 concurrently. An intermediate course in the theory, practice and technique of filmmaking. The course emphasizes idea development, creative process, methods of production, and production planning. Projects are made with a crew or individually, using film and/or digital technology, and digital post-production software. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMPR 331 may not take this course for credit.

FMPR 335 *Acting and Directing Acting for the Screen I* (3 credits)

Prerequisite: Written permission of the School of Cinema; FMPR 332 previously or concurrently, or six credits in Theatre Performance. This studio course for Cinema and Theatre students explores directing and performing for film; exercises are recorded on video for analysis. Both performers and directors examine acting and directing acting for the camera through such topics as role preparation, character development, and performance continuity. *NOTE A/See §200.3*

FMPR 336 *Introduction to Film Producing* (3 credits)

Prerequisite: FMPR 231 or written permission of the School of Cinema. A comprehensive course introducing students to the art of production methods. This implies exposure to the creative and technical aspects of the total production experience, and includes both independent and industry strategies and methods for fundraising, preparation of the project, production budgeting and scheduling techniques, legal and monetary involvement, and post-production, distribution, and exhibition strategies.

NOTE: Students who have received credit for FMPR 334 may not take this course for credit.

FMPR 338 *Image I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMST 211, 212; FMPR 332 and 340 previously or concurrently. This is a comprehensive course about the equipment and technologies available to the contemporary filmmaker. Traditional technical aspects of filmmaking remain fundamental in this course, while digital technologies are also explored. Students learn about different cameras, image formats, lenses, lighting and grip equipment, film stocks, electronic image support systems and laboratory procedures. Students must attend compulsory workshops in addition to classes.

NOTE: Students who have received credit for FMPR 342 may not take this course for credit.

FMPR 339 *Montage I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMST 211, 212; FMPR 332, 338 and 340 previously or concurrently. An introduction to methods, approaches and techniques of editing used by editors working in various genres of film — drama, documentary, experimental. Editing image, sound and preparation and supervision or re-recording are included. Analog and digital post-production platforms will be included. Attendance is required at mandatory laboratory sessions outside of class time. *NOTE A/See §200.3*

FMPR 340 *Sound I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMST 211, 212. An introductory course in the aesthetics of sound and music design, and the techniques of location and studio recording and post-production. Analog and digital platforms and technologies will be included. Weekly mandatory laboratory sessions.

NOTE: Students who have received credit for FMPR 242 may not take this course for credit.

FMPR 341 *Writing for Film I* (3 credits)

Prerequisite: Enrolment in the Major in Film Production; FMPR 231; FMST 211, 212. An introduction to writing for film, with special emphasis on the relation of the script to filmmaking. Students are expected to submit work of their own for discussion, analysis, and possible production in filmmaking courses. Students will also use special computer software to write scripts. *NOTE A/See §200.3*

FMPR 343 *Production Design* (3 credits)

Prerequisite: Enrolment in the Major in Film Production, FMPR 231, FMST 211 and 212; or written permission of the School of Cinema. A practical examination of the visual aspects of film production. Topics in production design considered may include texture and visual styles, the collaborative process, project management, and the nature of constraints which apply to student and independent productions. *NOTE A/See §200.3*

FMPR 350 *Ways of Seeing in Film Production* (3 credits)

Prerequisite: Enrolment in a Film Production program; FMPR 231; FMST 211, 212. A forum of ideas intended to increase the student's awareness of cinema as a visual medium. Aspects of our visual culture are presented and discussed: work by painters, photographers, sculptors, architects, and artists working with digital media. A relationship is made between the work of such artists and the work of the filmmaker. Students work on individual visual projects. *NOTE A/See §200.3*

NOTE: Students who have received credit for this topic under a FMPR 498 number may not take this course for credit.

FMPR 361 *Documentary Approaches in Film Production* (3 credits)

Prerequisite: Enrolment in a Film Production program; FMPR 231; FMST 211, 212. This course deals with aesthetic and conceptual issues surrounding the subject of documentary as a form. All issues in the production of a documentary film are treated, including budget, production, and post-production, and the changes brought by new technologies. This course also analyzes the shift in production away from film to digital technologies, in the field of the documentary.

NOTE: Students who have received credit for this topic under a FMPR 498 number may not take this course for credit.

FMPR 398 *Special Topics in Film Production* (3 credits)

This course provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE C/See §200.3

FMPR 399 *Special Topics in Film Production* (6 credits)

A course which provides an opportunity for the study of specialized aspects of film production outside the scope of existing courses. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *NOTE C/See §200.3*

FMPR 432 *Filmmaking III* (6 credits)

Prerequisite: FMPR 332, 338, 340; written permission of the School of Cinema. A progression of FMPR 332, with students working on more advanced filmmaking projects. Students will edit projects using digital technologies. The development of concepts introduced in FMPR 332 is continued. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Students who have received credit for FMPR 431 may not take this course for credit.

FMPR 435 *Acting and Directing Acting for the Screen II* (3 credits)

Prerequisite: FMPR 335 and written permission of the School of Cinema. A continuation of FMPR 335 on a more advanced level.

FMPR 438 *Image II* (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 332, 338, 340; FMPR 339 previously or concurrently; written permission of the School of Cinema. Building on the technical knowledge acquired in Image I, this course focuses on the art of cinematography. Advanced lighting and camera techniques are treated, emphasizing their aesthetic function. Students in this course will have mastered basic technical concerns, and are expected to develop interesting visual approaches for films made in Filmmaking III. Exercises are shot on film, digital and 35mm stills. Film excerpts and rushes are analyzed from a cinematographer's point of view.

FMPR 439 *Montage II* (3 credits)

Prerequisite: FMPR 339. A continuation of FMPR 339. This course is taught utilizing digital post-production editing systems.

FMPR 440 *Sound II* (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 338, 340. The central focus of the course is the creative designing of the soundtrack. The course emphasizes the interaction between sound and image in film and includes both individual and collective sound projects. This course is also taught on digital sound post-production platforms, and stresses the use of digital editing systems.

FMPR 441 *Writing for Film II* (3 credits)

Prerequisite: FMPR 341. A continuation of FMPR 341 on a more advanced level. Students will also use special computer software to write scripts.

FMPR 442 *Optical Printer Practice* (3 credits)

Prerequisite: Enrolment in the Major in Film Production with FMPR 338 previously or concurrently, or enrolment in the Major in Film Animation and FMAN 254, with written permission of the School of Cinema. A film production course assisting students in the understanding and application of advanced optical printer technology and aesthetics. *NOTE A/See §200.3*

FMPR 445 *Professional Internship* (6 credits)

Prerequisite: Written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply six credits towards the Film Production degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member.

FMPR 446 Professional Internship I (3 credits)

Prerequisite: Written permission of the School of Cinema. A Film Production student who will be employed within the film industry during the same calendar year may seek permission to apply three credits towards the Film Production degree program. A written proposal describing the project must be submitted prior to the work taking place in order to determine the appropriateness of the level and scope of the project. The School of Cinema must be satisfied that the work will be done under the joint supervision of a qualified professional and a full-time Cinema faculty member. *NOTE A/See §200.3*

FMPR 447 Professional Internship II (3 credits)

Prerequisite: Written permission of the School of Cinema. A student repeating FMPR 446 for credit registers under FMPR 447. *NOTE A/See §200.3*

FMPR 448 Independent Study I (3 credits)

Prerequisite: 24 credits completed in Film Production; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings. *NOTE A,C/See §200.3*

FMPR 449 Independent Study II (3 credits)

Prerequisite: FMPR 448; 24 credits completed in Film Production; written permission of the Department. A minimum cumulative GPA of 3.5 is required. This course offers a limited number of students the opportunity to pursue advanced research under the supervision of a full-time Cinema faculty member. A written agreement between the student and the supervisor shall clearly state the nature of the student's research, the scope of the project, and the work schedule. The study workload should be equivalent to a three-credit course in the program. Independent study may not duplicate curriculum offerings. *NOTE A/See §200.3*

FMPR 450 Film Production Specialization Seminar (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production and written permission of the School of Cinema. A seminar offering in-depth, practical approaches to artistic and technical situations. This course brings together all students in the Specialization in Film Production.

FMPR 451 Advanced Project Internship I (3 credits)

Prerequisite: Enrolment in the Specialization in Film Production or the Major in Film Production; FMPR 332 previously or concurrently; written permission of the School of Cinema. A Film Production student who contributes in a key position to a graduate project in the Film Production MFA program may apply for credits on the understanding that the application take place prior to the production and is authorized by the faculty members responsible for both programs.

FMPR 452 Advanced Project Internship II (3 credits)

Prerequisite: FMPR 451 and written permission of the School of Cinema. A student repeating FMPR 451 for credit registers under FMPR 452.

FMPR 498 Special Topics in Film Production (3 credits)

A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *NOTE A,C/See §200.3*

FMPR 499 Special Topics in Film Production (6 credits)

A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule. *NOTE A,C/See §200.3*

81.60.2 Filmmaking

Courses in which films are produced as a course requirement are:

FMAN 202⁶, 305⁶, 402⁹
FMPR 231⁶, 332⁶, 432⁶

81.60.3 Communication Studies Film Courses

NOTE: For course descriptions see §31.070.

Students enrolled in the Film Studies or Film Production Major or Specialization programs may select up to 12 credits from the Communication Studies courses listed below. Students enrolled in the Minor in Cinema and the Minor in Film Studies may select up to six credits from the Communication Studies courses listed below.

The credits earned may be applied as Film Studies and/or Cinema electives for degree purposes.

COMS 301	Selected Topics in National Cinemas (3 credits)
COMS 304	Selected Topics in Film Studies (3 credits)
COMS 416	Film Criticism (3 credits)
COMS 434	Advanced Topics in Film Studies (3 credits)

81.60.4 INTERDISCIPLINARY STUDIES IN SEXUALITY

Coordinators

FRANCES SHAVER, PhD Montr., Associate Professor, Sociology and Anthropology

THOMAS WAUGH, PhD Col., Professor and Concordia Research Chair, Mel Hoppenheim School of Cinema

Coordinating Committee

RACHEL BERGER, PhD Camb., Assistant Professor, History

DANIELLE BOBKER, PhD Rutgers, Assistant Professor, English

DONALD BOISVERT, PhD Ott., Assistant Professor, Religion

TAGNY DUFF, MFA C'dia., Assistant Professor, Communication Studies

GILBERT ÉMOND, PhD U.Q.A.M., Assistant Professor, Applied Human Sciences

EVERGON, MFA Roch.Inst.Tech., Assistant Professor, Studio Arts

MARCIE FRANK, PhD Johns H., Professor, English

BRIAN GABRIAL, PhD Minn., Assistant Professor, Journalism

ROBERT GIFFORD, MA C'nell., Assistant Professor, Art History

VINCE GRAZIANO, MA York (Can.), MLIS McG., Associate Librarian, Concordia Libraries

ROSS HIGGINS, PhD McG., Instructor, Sociology and Anthropology

WILSON CHACKO JACOB, PhD N.Y., Assistant Professor, History

EDWARD LITTLE, PhD Tor., Professor, Theatre

SHANNON MCSHEFFREY, PhD Tor., Professor, History

VIVIANE NAMASTE, PhD U.Q.A.M., Associate Professor and Concordia Research Chair, Simone de Beauvoir Institute

KAT O'BRIEN, MFA Alabama, Associate Professor, Design Art

JAMES G. PFAUS, PhD Br.Col., Professor, Psychology

GENEVIÈVE RAIL, PhD Ill., Professor and Principal, Simone de Beauvoir Institute

HILARY ROSE, PhD Ga., Associate Professor, Applied Human Sciences

SANDRA WEBER, PhD Alta., Professor, Education

Program

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

27 Minor in Interdisciplinary Studies in Sexuality

12 Chosen from FFAR 290/INTE 270⁶; FASS 291/INTE 275³; FASS 392/INTE 392³; SOCI 375/ANTH 375^{3*}; FMST 392³

9 Elective credits on sexuality and sexual orientation chosen in consultation with the program coordinator from periodic topics courses and other suitable courses identified in a given year, and from the following regular courses:
AHSC 253³; ENGL 393³; FMST 391^{3*}; RELI 380³; WSDB 383³.

6 Chosen each year from courses in gender and women's studies in consultation with the program coordinator from a list of available offerings within departments of the Faculties of Fine Arts and Arts and Science.

*Prerequisites waived for students having completed six credits in the Minor in Interdisciplinary Studies in Sexuality.

Courses

FASS:

FASS 291 (also listed as INTE 275)

Introduction to Sexuality Research (3 credits)

An interdisciplinary survey of approaches to research in sexuality within the humanities, the arts, and the social sciences.

Basic concepts of sexual identity, values, conduct, representation, and politics are addressed through such topical concerns as pornography and censorship, and through the perennial dialogue between biological and socio-cultural models of sexuality. The relation between theories and research methods is discussed in the context of classical and current research and creative activity. The syllabus reflects the varying specializations of the instructors from year to year.

NOTE: Students who have received credit for

INTE 275, INTE 391 or FASS 391 may not take this course for credit.

FASS 392 (also listed as INTE 392)

Queer Theory (3 credits)

Prerequisite: 30 credits. An interdisciplinary survey of the basic post-1970 theories of sexual minorities and diversity, in their historical and cultural contexts. Authors from Michel Foucault to Eve Kosofsky Sedgwick are introduced, as well as the work of artists and performers from Derek Jarman to k.d. lang. The syllabus reflects the varying specializations of the instructors from year to year.

NOTE: Students who have received credit for INTE 392 may not take this course for credit.

81.70

CONTEMPORARY DANCE

Faculty

Chair

MICHAEL MONTANARO, Grad. Maj. *Hartford Conserv.*, Associate Professor

Professor

SILVY PANET-RAYMOND, MEd *Montr.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

GM Building, Room: 500-01

Tel.: 514-848-2424, ext. 4555/4559

Fax: 514-848-3155

Email: dance@concordia.ca

Website: dance.concordia.ca

Department Objectives

The Contemporary Dance Department offers comprehensive training which combines formal dance training with extensive studies in choreography. Encouraging students to discover and develop their individual creative capacities as both dancers and choreographers is the mission of the Dance program.

Performance is a crucial element in this development, and students at Concordia gain valuable experience performing or staging their own choreographies.

Program

Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

60 BFA Major in Contemporary Dance

18 DANC 201⁶, 301⁶, 401⁶

18 DANC 205⁶, 305⁶, 405⁶

12 DANC 320⁶, 420⁶

3 DANC 211³

3 DANC 250³

3 DANC 260³

3 DANC 350³

81.70.1 Admission to Contemporary Dance

There is a distinct procedure for admission to the Major in Contemporary Dance in addition to the normal admission process of Concordia University. All applicants to Contemporary Dance are required to attend an *audition* as part of the admission process. Applicants should preferably contact the Department of Contemporary Dance before March 1 to arrange their audition and for detailed information regarding admission to Dance.

Courses

DANC 201 Creative Process I (6 credits)

Prerequisite: Appropriate technique course (DANC 205 [210], 305 [310], or 405 [410], as determined by the Department) concurrently; enrolment in the Major in Contemporary Dance, or written permission of the Department. Introduction to the creative process in dance. Students learn to explore, observe, and structure ideas and movements through improvisations and specific exercises

which cover such fundamentals as kinetics, rhythm and dynamics, spatial organization, perceptual skills, integration of acoustic, visual and verbal elements, and the use of technology as a creative tool. In addition to the regular studio hours, students must attend two hours of laboratory each week.

NOTE: Students who have received credit for DANC 200 may not take this course for credit.

DANC 205 *Technique I* (6 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department. Emphasis is placed on the proper alignment and placement of the body in stillness and in motion. Integration and execution of movement fundamentals and sequences are taught as a preparation for dance.

NOTE: Students who have received credit for DANC 210 may not take this course for credit.

DANC 211 *Dance Traditions* (3 credits)

A survey of the history of dance, including relations between modernism, post-modernism, and beyond. Support material may include slides and videos, and bibliographies of specific topics. The course is also designed to provide opportunities for personal and critical reflection and stimulation for contemplating ideas related to dance.

DANC 240* *Principles of Contemporary Dance* (6 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A survey of technical skills, improvisation, and dance composition. Studio: four hours per week. Laboratory: two hours per week.

**Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their degree program.*

DANC 250 *Aspects of Production for Dance* (3 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department. This course provides students with a forum for exploration, experimentation, and for study of process and principles of technical production in the performing arts. Students learn the basic techniques of creation-based production as well as the practical skills used in the successful application of technical theory. Topics may include costume, make-up, audio-visual support and documentation as well as the use of current technologies within the context of the creative and choreographic process of contemporary dance.

DANC 260 *Sound and Silence for the Dancer* (3 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department of Contemporary Dance. The basics of music theory through guided analytical text using singing, single line score reading and moving, including the study of rhythm, melody, harmony, tempi, dynamics, tone colour, and musical forms with emphasis on the fundamental understanding of rhythm, melody, and harmony physically and mentally.

NOTE: Students who have received credit for DANC 230 may not take this course for credit.

DANC 261 *Summer Workshop in Dance I* (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Sequences of studio sessions which may include body movement, improvisation, performance technique, and choreography. Studio: four hours per week. Laboratory: two hours per week.

NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their program requirements.

DANC 262 *Summer Workshop in Dance II* (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A continuation of DANC 261. Studio: four hours per week. Laboratory: two hours per week.

NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their program requirements.

DANC 301 *Creative Process II* (6 credits)

Prerequisite: Appropriate technique course (DANC 205 [210], 305 [310], or 405 [410], as determined by the Department) and DANC 320 concurrently; DANC 200 or 201; and enrolment in the Major in Contemporary Dance, or written permission of the Department. A continuation of DANC 200. Students further develop the practical and theoretical aspects of the creative process in dance and the elaboration of an individualized kinetic language. Methods of research and their application to concepts, themes, collaborations, projects, and the use of technology are evolved in studio and laboratories. In addition to the regular studio hours, students must attend two hours of laboratory each week.

NOTE: Students who have received credit for DANC 300 may not take this course for credit.

DANC 305 *Technique II* (6 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department. Emphasis is placed on the technical development of suppleness, strength, coordination, rhythm, and kinetic fundamentals. Loco-motor patterns, spatial relations, and phrasing are formulated into movement sequences to prepare the students for dance.

NOTE: Students who have received credit for DANC 310 may not take this course for credit.

DANC 320 *Choreography I* (6 credits)

Prerequisite: Appropriate technique course (DANC 205 [210], 305 [310], or 405 [410], as determined by the Department) and DANC 300 or 301 concurrently; enrolment in the Major in Contemporary Dance, or written permission of the Department. Choreography is the art of rendering a concept into the physical design of dance through movement and forms of notation. This course develops personal creativity and broadens the student's physical and expressive potential into public performances. By

organizing movement, space, and time into dances, students follow through the stages of originating ideas, developing themes, and rehearsing and performing choreographic creations. The course also explores the role that technology plays within both the choreographic and production processes. Practical exercises provide students with a working knowledge in the use of video, sound manipulation, and stage lighting.

DANC 330 *Principles of Anatomy and Body Movement* (6 credits)

Prerequisite: DANC 205 (210), and written permission of the Department of Contemporary Dance. A workshop of movement fundamentals based on the practical understanding of anatomy and dance technique. Studio: six hours per week.

DANC 350 *Practical Anatomy for the Moving Body* (3 credits)

An introduction to human anatomy in relation to movement and dance. The study of skeletal structure and the function of muscles and joints for proper alignment.

DANC 398 *Special Topics in Dance* (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Topics vary from year to year, taking into account the special aptitudes of instructors and students. Studio: six hours. *NOTE C/See §200.3*

DANC 401 *Creative Process III* (6 credits)

Prerequisite: Appropriate technique class (DANC 205 [210], 305 [310], or 405 [410], as determined by the Department) and DANC 420 concurrently; enrolment in the Major in Contemporary Dance, or written permission of the Department. A continuation of DANC 301 (300). This course enables students to advance their creative process and practice as movement artists through kinetic exploration, improvisation, performance coaching, extended studio projects, and lab reports. Discussion of current artistic issues and cultural manifestations help students situate their own research within a diversity of contexts. Building on initial research carried out in DANC 301 (300), further exploration is conducted into the use of technology within the creative process. In addition to the regular studio hours, students must attend two hours of laboratory each week.

NOTE: Students who have received credit for DANC 400 may not take this course for credit.

DANC 405 *Technique III* (6 credits)

Prerequisite: Enrolment in the Major in Contemporary Dance, or written permission of the Department. Emphasis is placed on refining and consolidating the student's practical understanding of kinetics in relation to placement, locomotion, movement patterns, dynamics, and phrasing. Students refine their perceptual and memory skills, and learn to integrate more complex movement notions to support interpretation in dance.

NOTE: Students who have received credit for DANC 410 may not take this course for credit.

DANC 420 *Choreography II* (6 credits)

Prerequisite: Appropriate technique class (DANC 205 [210], 305 [310], or 405 [410], as determined by the Department) and DANC 401 (400) or 405 (410) concurrently; enrolment in the Major in Contemporary Dance, or written permission of the Department. Building on initial research carried out in DANC 320, further exploration is conducted into the use of technology within the choreographic process as well as an examination of the role that it plays in all aspects of production. This course expands on various approaches to choreography through movement research, discussion and theory, extended studio assignments, rehearsal management, and production. Students also examine the role of the choreographer in social, political, and artistic contexts. Students are expected to produce work for public performance.

DANC 441 *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department. Students who have completed advanced choreography courses or the equivalent have the opportunity of carrying out a project of independent study. Subject matter must deal with specific aspects of contemporary dance. Tutorials with the project advisor are mandatory. *NOTE A/See §200.3*

DANC 442 *Independent Study II* (3 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. A student repeating DANC 441 registers for credit under DANC 442. *NOTE A/See §200.3*

DANC 499 *Topics in Dance* (6 credits)

Prerequisite: Written permission of the Department of Contemporary Dance. Advanced choreography where movement shares equal emphasis with all other arts developed into multimedia theatre. Studio: four hours per week. Practice laboratory: two hours per week. Rehearsal: four hours per week.

Faculty

Chair

STEPHEN SNOW, PhD N.Y., *Professor*

Professor

SANDRA CURTIS, PhD C'dia.

Associate Professors

BONNIE HARNDEN, MA C'dia.

LOUISE LACROIX, MFA C'dia.

JOSÉE LECLERC, PhD C'dia.

YEHUDIT SILVERMAN, MA *Lesley*

Assistant Professors

JANIS TIMM-BOTTOS, PhD *New Mexico*

GUYLAINE VAILLANCOURT, PhD *Antioch*

LAUREL YOUNG, PhD *Temple*

Senior Lecturer

IRENE GERICKE, MA C'dia.

Affiliate Professors

SHERRY DIAMOND, MA *Calif.State, Los Angeles, JD Pacific Coast Sch.Law*

PHIL JONES, PhD *Herts.*

LELAND PETERSON, MA *Art Inst.Chic.*

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Visual Arts Building, Room: VA 264

514-848-2424, ext. 4790

creativeartstherapies.concordia.ca

Department Objectives

The Department of Creative Arts Therapies offers a program of study with options of specialization in Art Therapy and Drama Therapy, and Music Therapy, leading to the degree of Master/Magisteriate of Arts in Creative Arts Therapies. In addition, the Department offers a Graduate Certificate in Music Therapy.

Three introductory courses, which are prerequisites for admission to the Art Therapy and Drama Therapy MA Options, and the Graduate Certificate in Music Therapy, are offered at the undergraduate level. These courses are designed to provide prospective students with a foundation in either Art Therapy, Drama Therapy, or Music Therapy.

Courses

Art Therapy:

This course is intended as partial preparation for graduate studies in the field of art therapy.

ATRP 301 *An Introduction to Art Therapy* (3 credits)

Prerequisite: 30 credits; PSYC 200 or equivalent; six credits in Studio Arts. This course provides an introduction to the subject and profession of art therapy, including its history, key processes, and selected approaches. Didactic and experiential components provide students with a broad understanding of the application of basic concepts in art therapy.

Drama Therapy:

This course is intended as partial preparation for graduate studies in the field of drama therapy.

DTHY 301 *An Introduction to Drama Therapy* (3 credits)

Prerequisite: 30 credits; PSYC 200 or equivalent; permission of the Department of Creative Arts Therapies. This course provides an introduction to the subject and profession of drama therapy, including its history, key processes, and selected approaches. Didactic and experiential components provide students with a broad understanding of the application of basic concepts in drama therapy.

NOTE: Students who have received credit for TDEV 421, DFHD 421, or DINE 420 may not take this course for credit.

Music Therapy:

This course is intended as partial preparation for graduate studies in the field of music therapy.

MTHY 301 *An Introduction to Music Therapy* (3 credits)

Prerequisite: 30 credits; PSYC 200 or equivalent; six credits in Music. This course provides an introduction to the subject and profession of music therapy, including its history, key processes, and selected approaches. Didactic and experiential components provide students with a broad understanding of the application of basic concepts in music therapy.

Faculty

Chair

JOANNA BERZOWSKA, MSc M.I.T., Associate Professor

Canada Research Chair

SHA XIN WEI, PhD Stan.

Associate Professors

PK LANGSHAW, MFA U.Q.A.M.

JASON EDWARD LEWIS, MPhil R.C.A.

CHRISTOPHER MOORE, MFA N.S.C.A.D.

KAT O'BRIEN, MFA Alabama

MARTIN RACINE, PhD Montr.

RHONA RICHMAN KENNEALLY, PhD McG.

CHRISTOPHER SALTER, PhD Stan.

Assistant Professors

CARMELA CUCUZZELLA, PhD Montr.

NATHALIE DUMONT, MA R'dg.

JONATHAN LESSARD, MA Montr.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Engineering, Computer Science and Visual Arts Complex, Room: EV 6.761

514-848-2424, ext. 4626

Department Objectives

The Department offers programs that examine the broad vision or culture of design within contemporary society.

The Design Major is located primarily within the disciplines of image, object-making, and screen-based media in design practice with an emphasis on the study of material culture. Digital technologies are integrated into the creative process to serve as strategies and tools for enhanced communication, application, representation, and dissemination.

The Computation Arts programs are concentrated within the digital and virtual environments where computer technology is embedded in all stages of the creative process and production. The Internet as a system for communication in information and networked societies serves as the intersection that strongly links the disciplines of Design and Computation Arts. Students are encouraged to take courses across Design and Computation Arts.

81.90.1 DESIGN

Program Objective

The Design Major offers a program of study that examines the environments of image, object, and web design as persuasive forms of intervention and mediation in contemporary society. Emphasis is put on material culture studies that have a strong impact on design history and theory, the world of the everyday, and the primacy of the artefact as a reflection of the cultural landscape. Students develop a background in the three streams and then specialize according to their interests and abilities. In both the theoretical and practical considerations of the program, the curriculum integrates creative experimentation in social design with ecologically oriented and collaborative productions.

Program

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

- 72 BFA Major in Design**
- 6 DART 261³, 262³
- 3 DART 280³
- 3 DART 380³ or 381³
- 18 DART 291³, 292³, 391³, 392³, 491³, 492³
- 3 Chosen from DART 221³, 223³, 225³, 229³, 298³
- 3 Chosen from DART 331³, 335³, 339³, 398³
- 12 Chosen from DART 400-level courses
- 6 Chosen from Art History or Art Theory electives
- 18 Computation Arts, or other Fine Arts electives

Design Co-operative Program

The Design co-operative program is available to selected students who are enrolled in the BFA program and are majoring in Design. The academic content of the co-op program is identical to the regular program with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. Please see §24 for specific details concerning the curriculum.

Admission to the Major in Design

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Design Art. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.90.2 COMPUTATION ARTS

Program Objective

The Computation Arts programs facilitate a hybrid learning environment for the integration of fine arts and computer science. The core curriculum incorporates conceptual and technical aspects of dynamic imagery, sound, and virtual dimension. Teaching emphasizes non-traditional applications of digital technologies while also developing awareness of the cultural and political implications of new technologies in networked and information societies. Areas of interest in the program include interaction design, physical computing, immersive environments, and experimental sound.

Programs

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

- 60 BFA Specialization in Computation Arts**
- 9 CART 211³, 212³, 253³
- 6 CART 214³, 255³
- 3 CART 351³
- 9-12 Chosen from CART 312³, 345³, 346³, 347³, 353³, 355³, 356³, 357³, 358³, 360³, 361³, 362³, 370³, 398³
- 6 CART 411³, 412³
- 9-12 Chosen from CART 414³, 434³, 444³, 453³, 455³, 456³, 457³, 458³, 460³, 498³
- 9 Chosen from CART, DART, EAST, IMCA, or other Fine Arts electives
- 6 Chosen from ARTH or other Fine Arts theory electives
- 45 BFA Major in Computation Arts
(to be combined with Computer Applications Option)**
- 6 FFAR 250⁶
- 21 CART 211³, 212³, 214³, 255³, 351³, 411³, 412³
- 6 Chosen from CART 312³, 345³, 346³, 347³, 353³, 355³, 356³, 357³, 358³, 360³, 361³, 362³, 370³, 398³
- 6 Chosen from CART 414³, 434³, 444³, 453³, 455³, 456³, 457³, 458³, 460³, 498³
- 6 Chosen from DART, EAST, IMCA, or other Fine Arts electives in consultation with an advisor
- 24 Minor in Computation Arts**
- 9 CART 211³, 212³, 253³
- 3 CART 351³
- 6 Chosen from CART 312³, 345³, 346³, 347³, 353³, 355³, 356³, 357³, 358³, 360³, 361³, 362³, 370³, 398³
- 6 CART 411³, 412³

Computation Arts Co-operative Program

The Computation Arts co-operative program is available to selected students who are enrolled in the BFA program, Major or Specialization in Computation Arts. The academic content of the co-op program is identical to the regular program with some specific recommendations for courses designed to improve and enhance the student's quality of work performance. Please see §24 for specific details concerning the curriculum.

Admission to the Specialization, Major*, and Minor** in Computation Arts

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Specialization or Major in Computation Arts. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

*The Major in Computation Arts (45 credits) must be taken in combination with the Option in Computer Applications (45 credits) offered by the Department of Computer Science and Software Engineering. Candidates applying for the Major in Computation Arts are required to complete the 10.12 profile: Mathematics 103 or 201-NYA and 203 or 201-NYB, and 105 or 201-NYC. Candidates lacking Cegep profile 10.12, but with a suitable background, may also be considered for this program. Applicants to the Specialization or Minor in Computation Arts require no background in mathematics.

**The minor is available to a limited number of high-ranking students. Applicants must submit a full portfolio by the March 1 deadline and may contact the Department of Design and Computation Arts for specific application procedures.

COURSES

Computation Arts:

CART 211 *Creative Computing and Network Culture* (3 credits)

Prerequisite: Enrolment in a Computation Arts program or written permission of the Department. This course gives a broad introduction to the fundamentals of creative computing and network culture. Through readings and practical examples, students explore the histories of the Internet, computing, and interactivity as well as gain knowledge of fundamental technical tools used for creating network-based media.

NOTE: Students who have received credit for DFAR 251 or CART 251 may not take this course for credit.

CART 212 *Digital Media Studio I* (3 credits)

Prerequisite: CART 211; enrolment in a Computation Arts program; or written permission of the Department. This studio-based course focuses on the production of dynamic and interactive audio/visual media. Students develop proficiency in generating original audio and visual material as well as exposure to current digital media software. Concurrent with gaining knowledge of existing tools for production, students create a high-quality studio work for portfolio inclusion.

NOTE: Students who have received credit for DFAR 252 or CART 252 may not take this course for credit.

CART 214 *Visual Form and Communication* (3 credits)

Prerequisite: Enrolment in a Computation Arts program or written permission of the Department. Key themes of visual communication are explored in the context of computation arts. This studio course considers design elements such as line, pattern, shape, texture, interpretation of space, surface, perspective, dimension, repetition, randomness, colour and colour spaces, typography, drawing from observation, layout and composition and conceptualization. This class is predominantly non-digital and discusses the relationships between analog and digital approaches.

NOTE: Students who have received credit for CART 254 may not take this course for credit.

CART 253 *Creative Computation I* (3 credits)

Prerequisite: Enrolment in the Specialization or Minor in Computation Arts; or written permission of the Department. The fundamentals of computer programming are introduced through exercises and studio projects. Students are exposed to scripting and programming in order to understand how they may be used to support creative digital work.

NOTE: Students who have received credit for DFAR 253 or 353 may not take this course for credit.

CART 255 *New Media Theory* (3 credits)

Prerequisite: Enrolment in a Computation Arts program or written permission of the Department. This course is a critical introduction to new media theory focusing on issues of interaction, inscription, representation, code, reproduction, spectacle, control, body and resistance. Students develop tools to undertake a critical analysis of media and technology and their social, political, economic, and cultural ramifications.

CART 312 *Digital Media Studio II* (3 credits)

Prerequisite: CART 212, 252; 24 or more credits in the Specialization, Major, or Minor in Computation Arts, or written permission of the Department. This studio-based course furthers work done in CART 212, focusing on the production and authoring of dynamic audio/visual media using advanced techniques such as compositing and motion graphics. Students develop proficiency in generating original audio and visual material as well as exposure to current digital audio-visual-authoring software including

postproduction environments such as After Effects and Motion. Concurrent with gaining knowledge of existing tools for production, students create a term-long project which will be a high quality, studio work appropriate for portfolio inclusion.

NOTE: Students who have received credit for DFAR 350, 352 and CART 352 may not take this course for credit.

CART 345 *Digital Texts and Typography I* (3 credits)

Prerequisite: Enrolment in a Computation Arts, Electroacoustics, or Intermedia/Cyberarts program; or written permission of the Department. This is a studio course in which students conduct experiments in digital text, type, and typography. It looks at how type can be used in dynamic, interactive, and performative contexts, how manipulating the appearance and behaviour of type affects the meaning of the text, and how to work with the materiality of letterforms. Class projects include motion typography for video, interactive texts, liquid/random/malleable fonts, and computationally responsive letterforms.

NOTE: Students who have received credit for DFAR 355 or for this topic under a CART 355 number may not take this course for credit. NOTE: Students are expected to have training in the fundamentals of typography.

CART 346 *Digital Sound I: Theory and Practice of Real-Time Audio* (3 credits)

Prerequisite: 24 credits in a Computation Arts, Electroacoustics, or Intermedia/Cyberarts program; or written permission of the Department. This course is an introduction to the fundamental principles of real-time digital audio: the use of a computer to process, synthesize, and manipulate digitized representations of sound in real-time. Topics such as physics of sound, sampling, synthesis techniques, filters, and acoustics are introduced through the use of the real-time programming environments Max/MSP and SuperCollider. Students experiment with digital audio techniques through lab exercises and the development of a final real-time composition/sound design work.

NOTE: Students who have received credit for this topic under a CART 356 number may not take this course for credit.

CART 347 *Digital Sound II: Sound Design* (3 credits)

Prerequisite: CART 346; 24 credits in a Computation Arts, Electroacoustics, or Intermedia/Cyberarts program; or written permission of the Department. This course is a seminar/project studio in the conceptual and technical nature of digitally based sound design for film, video, and interactive multimedia (web, DVDs, games, sensor-augmented environments). Topics include sound and image fusion, audio-vision and conceptual/technical issues related to file and compression formats, spatialization (5.1), communication protocols, editing, mixing, tracking, asset creation and socio-cultural theories of audition. A term-long individual or group-based project is developed that takes participants through all phases of the sound design production workflow.

NOTE: Students who have received credit for this topic under a CART 356 number may not take this course for credit.

CART 351 *Networks and Navigation* (3 credits)

Prerequisite: CART 211, 212, 253; 24 credits in the Specialization or Major in Computation Arts; or written permission of the Department. In this studio course, students develop interactive projects that take advantage of networked data, redefine online communities, and experiment with new communication structures. The perceptual and aesthetic aspects of digital media are addressed in relation to the technical skill sets required for navigating and understanding the possibilities and limits of networked environments.

NOTE: Students who have received credit for DFAR 350 or 351 may not take this course for credit.

CART 353 *Creative Computation II* (3 credits)

Prerequisite: CART 253; 24 credits in a Computation Arts program; or written permission of the Department. An investigation of paradigms for programming, with concentration on topics of interest to digital art and design. Through lectures, readings, and projects, students explore topics including artificial life, evolutionary computation, and real-time programming.

NOTE: Students who have received credit for CART 363 may not take this course for credit.

CART 355 *Topics in Kinetic Imagery* (3 credits)

Prerequisite: 24 credits in a Computation Arts program. This course provides an opportunity for the study of special topics in kinetic imagery. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for DFAR 355 may not take this course for credit.

CART 356 *Topics in Abstract Soundscapes* (3 credits)

Prerequisite: 24 credits in a Computation Arts program. This course provides an opportunity for the study of special topics in abstract soundscapes. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for DFAR 356 may not take this course for credit.

CART 357 *Topics in Digital Space* (3 credits)

Prerequisite: 24 credits in a Computation Arts program. This course provides an opportunity for the study of special topics in digital and immersive space. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for DFAR 357 may not take this course for credit.

CART 358 *Topics in Senses and Perception* (3 credits)

Prerequisite: 24 credits in a Computation Arts program. Research into sensory perception, touch, and noise is key to project proposals, methodology, and production. Interdisciplinary referencing and collaborative projects are emphasized. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for DFAR 358 may not take this course for credit.

CART 360 *Tangible Media and Physical Computing* (3 credits)

Prerequisite: 24 credits in a Computation Arts program. This course explores the concepts of tangible media and physical computation as well as related concepts of ubiquitous computing, wearable computing, and interaction design. The focus is on conceptual development, prototyping, and implementation of tangible media and physical computing artifacts from the perspectives of technical proficiency, functionality, aesthetics, and personal/social meaning.

NOTE: Students who have received credit for DFAR 360 may not take this course for credit.

CART 361 *3D Digital Production I* (3 credits)

Prerequisite: 24 credits in a Computation Arts program; or written permission of the Department. In this studio course, students are introduced to the language, principles, and practices of 3D digital animation. Students are exposed to a wide range of traditional film animation techniques and learn the technical skills and conceptual strategies for 3D digital production.

NOTE: Students who have received credit for CART 261 or for this topic under a FMAN 398 number may not take this course for credit.

CART 362 *3D Digital Production II* (3 credits)

Prerequisite: CART 361; enrolment in a Computation Arts program; or written permission of the Department. This intermediate studio furthers conceptual and technical skills related to 3D digital animation. Through film analysis, readings, and lectures, students study film animation aesthetics, contemporary film practice, and advanced 3D animation techniques.

NOTE: Students who have received credit for CART 262 or for this topic under a FMAN 398 number may not take this course for credit.

CART 370 *Real-Time Video* (3 credits)

Prerequisite: 24 credits in a Computation Arts program; or written permission of the Department. A studio course in the creation and real-time processing of moving textures and video. This course surveys computer-based video art, particularly applied to installation or performance arts. It provides an introduction to mathematical approaches to real-time processing of 2D and higher-dimensional arrays, image and video filters, motion segmentation, and tracking blobs, optical flow, faces, and shapes.

NOTE: Students who have received credit for this topic under a CART 498 number may not take this course for credit.

NOTE: Students should have experience or knowledge in videography and video editing.

CART 398 *Special Topics in Computation Arts* (3 credits)

Prerequisite: Enrolment in a Computation Arts program or written permission of the Department. This course provides an opportunity for the study of specialized aspects and applications in computation arts. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CART 411 *Project Studio I* (3 credits)

Prerequisite: CART 351, 253*; enrolment in the Specialization, Major or Minor in Computation Arts, 48 credits completed in the degree; or written permission of the Department. In this studio and theory course, students integrate skills with objects, narratives, and environments. They refine both critical and practical management skills in team-based projects.

NOTE: Students who have received credit for DFAR 450, DFAR 451, or CART 451 may not take this course for credit.

**Students registered in the specialization.*

CART 412 *Project Studio II* (3 credits)

Prerequisite: CART 411; enrolment in the Specialization, Major or Minor in Computation Arts, 48 credits completed in the degree; or written permission of the Department. An advanced studio and theory course in which students integrate skills with objects, narratives, and environments. They refine both critical and practical management skills in team-based projects.

NOTE: Students who have received credit for DFAR 450, DFAR 452, or CART 452 may not take this course for credit.

CART 414 *Matter and Media* (3 credits)

Prerequisite: CART 255; enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; or written permission of the Department. This seminar prepares students for professional creation/research via analog or computational media and material arts, informed by philosophy of technology, art, and design. Topics may include continuity, transformation, distributed agency, responsivity, and tangibility.

NOTE: Students who have received credit for DFAR 454 or for this topic under a CART 454 number may not take this course for credit.

CART 434 *Advanced 3D Studio* (3 credits)

Prerequisite: CART 361, 362; 24 credits in the Specialization or Major in Computation Arts; or written permission of the Department. This advanced studio builds upon 3D modelling for animation, gaming, and spatial environments. Concurrent with the development of technical skill sets, students develop thematic projects with consideration given to industry standards and cultural products for public or private enterprise.

NOTE: Students who have received credit for DFAR 354 or CART 354 may not take this course for credit.

CART 444 *Portfolio Studio* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 60 credits completed in the degree; or written permission of the Department. This studio course leads graduating Computation Arts students through an analysis and synthesis of a personal body of work, self-promotional material, and a framework for a group exhibition. Discussions and assignments address

the technical, formal, and conceptual elements in their work, and strategies for documentation and presentation. Students are also expected to locate their work in a social, cultural, and historical context. Various future options for Computation Arts graduates are discussed, including careers in art, entrepreneurship, design, research, and academia.

NOTE: Students who have received credit for this topic under a CART 498 number may not take this course for credit.

CART 453 *The Digital Nomad* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; or written permission of the Department. This studio course is based on mobility or nomadic considerations in new media productions. Transportable and flexible equipment configurations are developed to support on-site performance events, projection, and multimedia installations.

NOTE: Students who have received credit for DFAR 453 may not take this course for credit.

CART 454 *Topics in Multimedia Theory* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; or written permission of the Department. A seminar with a studio component, concentrating on current discourse in multimedia.

NOTE: Students who have received credit for DFAR 454 may not take this course for credit.

CART 455 *Professional Internship I* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; written permission of the Department. Students work in the industry for a period of nine to 13 weeks to allow them to gain experience in design firms and multimedia companies. Internships approved for credit must be academically appropriate to the program.

NOTE: Students who have received credit for DFAR 455 may not take this course for credit.

CART 456 *Professional Internship II* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; written permission of the Department. Students work in the industry for a period of nine to 13 weeks to gain experience in design firms and multimedia companies. Internships approved for credit must be academically appropriate to the program.

NOTE: Students who have received credit for DFAR 456 may not take this course for credit.

CART 457 *Independent Study I* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; written permission of the Department. This option is for students choosing to undertake independent research under the supervision of a full-time faculty advisor. Research projects approved for credit must be academically appropriate to the program.

NOTE: Students who have received credit for DFAR 457 may not take this course for credit.

CART 458 *Independent Study II* (3 credits)

Prerequisite: Enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; written permission of the Department. This option is for students choosing to undertake independent research under the supervision of a full-time faculty advisor. Research projects approved for credit must be academically appropriate to the program.

NOTE: Students who have received credit for DFAR 458 may not take this course for credit.

CART 460 *Bending Bits: Advanced Topics in Digital Media* (3 credits)

Prerequisite: CART 411 previously or concurrently; enrolment in the Specialization or Major in Computation Arts, 48 credits completed in the degree; or written permission of the Department. An advanced studio course examining the ways computation can be deeply integrated into students' creative practices. Projects look at how computation can be used to transform interactivity into a semantic strategy, input/output into a dialogue between the user, the work, and the world, and data processing into means of aesthetic exploration.

NOTE: Students are expected to have solid skills in general-purpose programming before starting the class.

NOTE: Students who have received credit for DFAR 460 may not take this course for credit.

CART 498 *Special Topics in Computation Arts* (3 credits)

Prerequisite: Enrolment in a Computation Arts program or written permission of the Department. An advanced course which provides an opportunity for the study of specialized aspects and applications in digital fine arts. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Design Art:

DART 221 *Primary Digital Graphics* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. This computer lab course combines hands-on workshops with content-driven projects. Students are introduced to the fundamentals of graphic composition and communication for digital graphic arts. Photoshop, Illustrator, and QuarkXPress are introduced to explore image/text juxtaposition, layout, and typography.

NOTE: Students who have received credit for DART 200 may not take this course for credit.

DART 223 *Concept Visualization* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. This studio course is oriented toward traditional and innovative techniques to represent visual concepts for communication and production. Students develop their skills

in descriptive geometry and 3D visualization. The course includes sketching, perspective, and technical drawing. It also introduces creative methods of articulation and presentation.

NOTE: Students who have received credit for DART 200 may not take this course for credit.

DART 225 *Materials for 3D Design* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. This foundation studio course addresses materials and construction applications. Wood, metal, and plastics are examined as the primary building materials and surfaces for object-making. Knowledge acquisition is achieved through hands-on workshops, in combination with content-driven projects.

NOTE: Students who have received credit for DART 200 may not take this course for credit.

DART 229 *The Pixelated Eye* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. This studio course introduces conceptual and technical skills for recording and manipulating digital imagery. Topics include visual representation, image appropriation and copyright, documentation and archiving. Technical exercises and conceptually based projects take place in the studio and on location.

NOTE: Students who have received credit for DART 200 may not take this course for credit.

DART 261 *Design History and Theory I* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. Through readings, lectures, and dialogue, this course examines key themes in design and cultural history and theory, from industrialization to the beginning of the 20th century, with an emphasis on their ongoing relevance in the contemporary realm. Effective research methods in the discipline are introduced to facilitate development of students' analytical and critical abilities, both oral and written.

NOTE: Students are required to take this course in the first year of the Design program.

NOTE: Students who have received credit for DART 260 may not take this course for credit.

DART 262 *Design History and Theory II* (3 credits)

Prerequisite: DART 261; enrolment in the Major in Design or written permission of the Department. This course examines key themes in design and cultural history and theory since the early-20th century, with an emphasis on their relevance to contemporary discourse and practice. Building on their emerging research, analytical, and communication skills in the field, students are also encouraged to apply these abilities to the evolution of their own conceptual design processes.

NOTE: Students who have received credit for DART 260 may not take this course for credit.

DART 280 *2D Digital Concepts* (3 credits)

Prerequisite: DART 221, 223, 225 or 229; DART 291, 292 previously or concurrently; or written permission of the Department. The central theme of this studio course is the rescripting of formal texts into complementary works in the form of "livres d'objets." Utilizing digital layout and studio construction techniques for graphic design and packaging, students integrate design theory and practice through the inventive richness of bookworks.

NOTE: Students who have received credit for DART 200 may not take this course for credit.

DART 291 *Integrative Design Research I* (3 credits)

Prerequisite: DART 221, 223, 225 or 229; DART 261 previously or concurrently; or written permission of the Department. This theory-based course concentrates on integrative research and methodology in design art, by mapping the relationship of the individual within the public and private spaces of interdependence.

NOTE: Students who have received credit for DART 210 or 290 may not take this course for credit.

DART 292 *Integrative Design Research II* (3 credits)

Prerequisite: DART 221, 223, 225 or 229; DART 291; DART 261, 262, 280 previously or concurrently; or written permission of the Department. This theory-based course explores aspects of design art research and methodology, specifically the relationship between design and dominant cultural ideologies in both the public and private sphere. It also investigates the interconnectedness of design to the fine arts, humanities, and sciences. This is a continuation of DART 291.

NOTE: Students who have received credit for DART 210 or 290 may not take this course for credit.

DART 298 *Special Topics in Design Art* (3 credits)

Prerequisite: Enrolment in the Major in Design or written permission of the Department. This course provides an opportunity for the study of special issues in Design. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

DART 331 *Words in Space* (3 credits)

Prerequisite: DART 280; DART 391, 392 previously or concurrently; or written permission of the Department. This computer lab course emphasizes the poetics of typography with respect to font, type, text, and scripted experimentation. Issues of legibility, freedom of expression in type, and contemporary typography are referenced in the process of generating unique font sets.

NOTE: Students who have received credit for DART 300 may not take this course for credit.

DART 335 *Interpretive Public Spaces* (3 credits)

Prerequisite: DART 380 or 381; DART 391, 392 previously or concurrently; or written permission of the Department. This studio course develops strategies for interactions in the public sphere. The application of scenography, planning of space and the integration of content orients the student towards the design of museum installations, mobile exhibitions, and performative events.

DART 339 *Second Skin and Soft Wear* (3 credits)

Prerequisite: DART 380 or 381; DART 391, 392 previously or concurrently; or written permission of the Department. This studio course explores the idea of “skin” and “soft” as terms that possess physical and associative properties. Housing for the body, computer wearables, sculptural design and soft furniture are considered as design concepts for maquettes and prototypes. Recycling of materials and alternative material use are emphasized.

DART 380 *3D Digital Concepts* (3 credits)

Prerequisite: DART 280; 24 credits in the Major in Design; or written permission of the Department. This computer lab course introduces students to computer-assisted 3D design concepts. Practical exercises advance technical skills and are combined with thematic proposals for virtual object representation. Scaled object production is encouraged in the final stages of the studio.

NOTE: Students who have received credit for DART 300 may not take this course for credit.

DART 381 *Digital Concepts/Multimedia* (3 credits)

Prerequisite: DART 280; 24 credits in the Major in Design; or written permission of the Department. This computer lab course introduces students to 3D modelling and rendering and basic animation for multimedia applications. Practical exercises advance technical skills and are combined with thematic proposals for 3D objects and virtual space in networked environments.

NOTE: Students who have received credit for DART 300 may not take this course for credit.

DART 391 *Collaborative Design Research I* (3 credits)

Prerequisite: DART 261, 262, 291, 292; 24 credits in the Major in Design; or written permission of the Department. This is a core theory-based studio course in research methodology and strategies for collaborative project development, highlighting the role of designer as mediator and author. Particular attention is given to the democratic voice within the community and to environmental sustainability.

NOTE: Students who have received credit for DART 310 or 390 may not take this course for credit.

DART 392 *Collaborative Design Research II* (3 credits)

Prerequisite: DART 261, 262, 291, 292, 391; 24 credits in the Major in Design; or written permission of the Department. This is a core theory-based studio course which highlights collaborative approaches to the application of research methodology and strategies pertaining to design as an ethical and socially conscious construct. This is a continuation of DART 391.

NOTE: Students who have received credit for DART 310 or 390 may not take this course for credit.

DART 398 *Special Topics in Design* (3 credits)

Prerequisite: 24 credits in the Major in Design or written permission of the Department. This course provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

DART 441 *The Culture of Images* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This studio course explores images as composite surfaces informed by the urban landscape. Strategies for commentary, and engagement in image-saturated societies include image ethics, appropriation, and design as intervention. Book works, projected images and print series are produced, and range in size from handheld to the architectural.

NOTE: Students who have received credit for DART 422 may not take this course for credit.

DART 442 *Scenarios for Typography* (3 credits)

Prerequisite: DART 331; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This computer lab course, subtitled “Gutenberg verses for a Macintosh play,” engages in the eccentricity of typographic exploration through relocation, rescaling, and renaming of script. The potential for poetic play on words is explored through text as image and object.

NOTE: Students who have received credit for DART 422 may not take this course for credit.

DART 443 *Print: Meaning and Process* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This computer lab course focuses on graphic design in publishing systems. The implications of mass production, the responsible use of resources, and alternative print and packaging processes are key factors in the ecology of image production.

NOTE: Students who have received credit for DART 424 may not take this course for credit.

DART 444 *The Articulate Self* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. The uniqueness of each artistic identity is explored in this course through the production of the portfolio. Content and written support must be developed in tandem to locate the experience, abilities, and future potential of the designer.

NOTE: Students who have received credit for DART 424 may not take this course for credit.

DART 445 *The Narrative Object* (3 credits)

Prerequisite: DART 380 or 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. In this studio course, the mythic potential of objects as personal and cultural markers is considered in the context of everyday life. Students construct meaning through objects, responding to the potential for expression inherent in materials, structure, and form. The rigour of observation, analysis, and interpretation of object stimulates opportunities for multiple readings.

NOTE: Students who have received credit for DART 423 may not take this course for credit.

DART 446 *Encultured Space* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This design studio course focuses on the notion that all objects reside in an encultured space. Students are encouraged to investigate the nuances and connotations of the urban landscape which govern an understanding of these objects, by direct interventions into physical and symbolic character.

NOTE: Students who have received credit for DART 423 may not take this course for credit.

DART 447 *3D Design Technologies* (3 credits)

Prerequisite: DART 380; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This design studio course allows students to explore the integration of digital technologies in all aspects of the design process. Computer-assisted design, 3D scanning and rapid prototyping technologies are facilitated in order to develop innovative concepts in object production.

NOTE: Students who have received credit for DART 425 may not take this course for credit.

DART 448 *Ecology and 3D Design* (3 credits)

Prerequisite: DART 380; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This design studio course is oriented towards sustainable design and environmental issues. Strategies including design for disassembly, recuperation, recycling and lifecycle analysis are used to develop objects that conform with principles of design responsibility. Student works will be juried and selected for public exhibition.

NOTE: Students who have received credit for DART 425 may not take this course for credit.

DART 449 *The Language of the Web* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This lab course explores the technical and conceptual challenges facing designers working online. Students construct websites engaging directly with notions of interactivity, graphic user interface, image sequencing, navigation, and innovative ways of organizing and disseminating information.

NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.

DART 450 *Web Interventions* (3 credits)

Prerequisite: DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This lab course examines the strategies and discourse of socially engaged designers, artists in networked environments. Through the creation of their own online interventions, students are encouraged to question the “promise” of new communication technologies as open and democratic instruments of social change.

NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.

DART 451 *Digital Interaction* (3 credits)

Prerequisite: DART 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. This lab course considers the rhetoric of interactivity. The ubiquity of the graphic user interface is problematized through the use of non-linear narrative and metaphor. Students develop and select new paradigms for human-computer interaction.

NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.

DART 452 *Immersive Media* (3 credits)

Prerequisite: DART 381; DART 491, 492 previously or concurrently; 48 credits in the Major in Design; or written permission of the Department. Students in this interdisciplinary lab course consider the expanded use of technologies for digital media in the context of 3D objects and environments. Through collaborative projects, students explore immersive installations integrating sound, video, interactivity, and performative events.

NOTE: Students who have received credit for DART 410 or 411 may not take this course for credit.

DART 460 *Independent Study* (3 credits)

Prerequisite: 48 credits in the Major in Design or written permission of the Department. This option is for students wishing to undertake independent research under the supervision of a full-time faculty advisor.

DART 461 *Independent Study* (3 credits)

Prerequisite: 48 credits in the Major in Design or written permission of the Department. This option is for students wishing to undertake independent research under the supervision of a full-time faculty advisor.

DART 470 *Professional Internship* (6 credits)

Prerequisite: 48 credits in the Major in Design; written permission of the Department. This option is for students wishing to undertake research and obtain practical experience for academic credit as an intern with an established artist/designer, studio, publication, publishing house, museum, corporation, or non-profit organization. Other related options for internship will also be considered. The internship is carried out under the joint supervision of a qualified professional from within the University or the organization involved and a full-time faculty member. A clearly defined agreement between the Department, the student and the artist/designer or institution involved is made before the internship is undertaken. This agreement states clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate an appropriate academic experience for the student.

DART 471 *Professional Internship* (3 credits)

Prerequisite: 48 credits in the Major in Design; written permission of the Department. Three-credit internship, as described in DART 470, for one term only.

DART 481 *Design Outreach and Specialized Projects* (6 credits)

Prerequisite: 48 credits in the Major in Design or written permission of the Department. A mentorship and special project-based studio that provides students with opportunities to engage with existing community outreach programs, or create new projects in collaboration with other cultural and non-profit centres. The objectives of the studio are to strengthen existing ties between the University and Montreal-area communities, and further develop strategies for sustainable (cultural, ecological, and economic) design practice. Projects include *Dans la rue*, an organization serving youth on the street.

NOTE: Students who have received credit for this topic under a DART 498 number may not take this course for credit.

DART 491 *Discursive Design Research I* (3 credits)

Prerequisite: DART 391, 392; 48 credits in the Major in Design; or written permission of the Department. This core theoretical course combines lectures and discussions, emphasizing the contextual and societal implications of the design process from conception to production. Multidisciplinary approaches to design research and methodology allow students to advance the discourse of their own emerging design ethic and aesthetic.

NOTE: Students who have received credit for DART 400 or 490 may not take this course for credit.

DART 492 *Discursive Design Research II* (3 credits)

Prerequisite: DART 391, 392, 491; 48 credits in the Major in Design; or written permission of the Department. This core course explores the interstices between visual culture, material culture, and related theoretical discourses as disciplines which profoundly influence the design process. Particular attention is devoted to multidisciplinary engagement as applied to individual design scenarios. This course is a continuation of DART 491.

NOTE: Students who have received credit for DART 400 or 490 may not take this course for credit.

DART 498 *Special Topics in Design* (3 credits)

Prerequisite: 48 credits in the Major in Design or written permission of the Department. A course for advanced students which provides an opportunity for the study of special issues in design art. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

81.100

MUSIC

Faculty

Acting Chair

CHRISTINE BECKETT, PhD McG., Associate Professor

Canada Research Chair

SANDEEP BHAGWATI, Kuenstlerische Reifepruefung Musikhochschule Munich, CURSUS Ircam (Paris)

Professors

KEVIN AUSTIN, MMA McG.

CHRISTOPHER JACKSON, FRSC, D.S.L. (Honoris Causa), Dip Premier Prix Conserv. de Musique de Montr., Provost's Distinction

Associate Professors

LISELYN ADAMS, DipMusPerf Royal Conserv., The Hague

JERI BROWN, MEd Kent State

MARK CORWIN, DMA Wis.(Madison)

RICARDO DAL FARRA, PhD U.Q.A.M.

CHARLES ELLISON, MA Indiana

ROSEMARY MOUNTAIN, PhD Vic.B.C.

For the complete list of faculty members, please consult the Department website.

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Department Objectives

The Mission of the Department of Music is to develop musicians, to support musical activities through teaching, research and performances, and to foster the appreciation of the value of music and fine arts in society.

The Department is committed to the development of musicians through options and opportunities found within the multidisciplinary context of the Faculty of Fine Arts through generalized and specialized education.

Areas of study include theory, history, instrumental and vocal studies, including ensembles and private study, composition, jazz, electroacoustics/recording, and music technology.

Academic scholarship, research, and creativity enhance faculty members' teaching which furthers the Department's involvement in national and international artistic and scholarly communities.

Programs

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

SPECIALIZATIONS IN MUSIC

The Faculty of Fine Arts offers three specialization programs in Music, each of 66 credits. Students applying for entrance to the Department are accepted into the Major in Music. Upon completion of 30 credits, students may apply for transfer into a specialization. Acceptance into a specialization is based on the student's general academic performance in all university courses, but especially in the Music courses.

66 BFA Specialization in Jazz Studies

6 JAZZ 200⁶ or, if exempt, Department of Music electives, excluding MUSI 200⁶ and INMS 209³, 251³, and 252³

21 JPER 220⁶; INMS 210³, 311³, 351³, 352^{3*}; MPER 231³

6 MPER 251³, 252³

- 6 MHIS 200⁶ or, if exempt, MHIS electives
- 6 MHIS electives
- 18 Chosen from JAZZ 301³, 302³, 305⁶, 401³, 402³, 405⁶, JPER 321³, 330⁶, 341³, 421³, 422³, 430⁶, 441³
- 3 Department of Music electives, excluding INMS 209³, 251³, 252³, MUSI 211³, 251³ and 252³, chosen in consultation with a Music advisor.

**With permission of the Department of Music, students with exemption for INMS 351³ and 352³ substitute MUSI 451³ and 452³.*

66 BFA Specialization in Music Performance Studies

- 30 MUSI 211³, 212³, 251³, 252³, 311³, 351³, 352^{3*}, MPER 231³, 490⁶
- 6 MPER 251³, 252³
- 6 MPER 351³ and 352³ or MPER 390⁶
- 6 MHIS 200⁶ or, if exempt, MHIS electives
- 6 MHIS electives
- 12 Chosen from MPER 201³, 232³, 298³, 301³, 323³, 331³, 398³, 399⁶, 401³, 423³, 431³, 498³, 499⁶

**With permission of the Department of Music, students with exemption for MUSI 351³ and 352³ substitute MUSI 451³ and 452³.*

66 BFA Specialization in Music Composition

- 21 MUSI 212³, 311³, 351³, 352³, 451³, 452³; MPER 231³
- 6 MPER 251³, 252³
- 6 MHIS 200⁶ or, if exempt, Music electives
- 6 MHIS electives
- 12 MUSI 261³, 262³, 361³, 362³
- 15 Department of Music electives, excluding INMS 209³, 251³, 252³, MUSI 209³, 251³, 252³, chosen in consultation with a Music advisor.

48 BFA Major in Electroacoustic Studies

- 9 EAST 200⁶, 211³
- 12 EAST 300⁶, 310⁶
- 3 MHIS 241³
- 6 EAST 205⁶
- 6 EAST 305⁶
- 9 Chosen from EAST electives
- 3 Department of Music electives

54 BFA Major in Music

- 15 MUSI 211³, 212³, 251³, 252³, 351³
- 3 Chosen from MPER 201³, 223³, 231³
- 3 Chosen from MPER 361³, MUSI 322³, MUSI 421³
- 6 MHIS 200⁶ or, if exempt, MHIS electives
- 3 MHIS 331³
- 6 MUSI 401⁶
- 18 Department of Music electives to be chosen from a minimum of two course groups*

**Department of Music electives are organized into seven groups. The distribution is capped at a number of credits (3 to 12 depending upon the group) so that course selection must be drawn from at least two groups.*

24 Minor in Electroacoustic Studies

- 12 EAST 205⁶, 305⁶
- 6 Department of Music electives
- 6 Chosen from EAST 200⁶; EAST 211³ and MHIS 241³

24 Minor in Music

- 9 MUSI 211³, 251³ and 252³ or, if exempt, Music electives selected in consultation with a Music advisor
- 15 Music electives chosen in consultation with a Music advisor

81.100.1 Admission to Programs in Music

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to Music programs. All applicants to the Major or Minor in Electroacoustic Studies must submit a *portfolio* of their own work, the *Electroacoustic Information Sheet*, and a *letter of intent*. All applicants to the Major in Music must complete an *interview/audition*. All applicants to the major and minor programs in Music are required to pass Theory and Ear-Training Placement Tests (for placement in theory courses) prior to audition.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.100.2 Admission to Courses in Music for Non-Music Students

Specific procedures must be followed by all non-Music majors wishing to register in the Department of Music.

- Not all courses are available to non-Music students. Please consult the Department of Music for policy and accessibility of courses.
 - Students who wish to register for courses which have a theory prerequisite, given availability, must write the Theory placement test. This is done in the Department of Music at least two weeks prior to the registration appointment date.
 - Students who wish to sing or play in an ensemble must contact the Department of Music for information concerning audition and registration for Music Performance courses.
-

Courses

For specific information regarding entrance to courses in the Department of Music please see above.

Electroacoustic Studies:

EAST 200 *ASA and Aural Skills I* (6 credits)

Prerequisite: Enrolment in the Major or Minor in Electroacoustic Studies. Based upon concepts articulated in Auditory Scene Analysis. This intensive fundamental ear-training course is integrated with electroacoustics and music technology through composition. It offers a focused study of sound, acoustic and psychoacoustic, designed to develop the inner and outer ear. Direct practical application studies in sonic and musical dictation and creation fosters expanded and refined hearing.

NOTE: Students who have received credit for this topic under an EAMT 399 number may not take this course for credit.

EAST 203 *Digital Audio Editing* (3 credits)

An introduction to the study and practice of the Acousmatic and Sound Art tradition through the use of the computer as a manipulation platform and creative environment for the exploration of sound. This course includes historical and aesthetic aspects of the art. Classic and contemporary electroacoustic techniques are explored as are applications of electroacoustics in popular music. Related topics in acoustics, psychoacoustics, hearing, and audio technology are covered in order to provide a background for effective work in the digital environment.

NOTE: Students who have received credit for EAMT 203, or for this topic under an EAMT 398 or 399 number, may not take this course for credit.

NOTE: Students in a major, minor, or specialization program in the Department of Music may not apply this course for credit in a 90-credit degree program.

EAST 204 *Analog Studio Techniques* (3 credits)

Prerequisite: EAST 203. A lecture/workshop introduction to the analog studio. This course offers continued study and practice of the Acousmatic and Sound Art forms historical, aesthetic, and compositional assignments, as well as continued development of classic and contemporary electroacoustic techniques as they relate to the analog electroacoustic studio. Aspects of the studio including the basics of recording, tape manipulation techniques, mixing and multi-track recording, analog synthesis and signal processing are introduced and covered. Related topics in acoustics, psychoacoustics, hearing, and audio technology are covered in order to provide a background for effective work in the electroacoustic studio environment.

NOTE: Students who have received credit for EAMT 204, or for this topic under an EAMT 398 or 399 number, may not take this course for credit.

NOTE: Students in a major, minor, or specialization program in the Department of Music may not apply this course for credit in a 90-credit degree program.

EAST 205 *Electroacoustics I* (6 credits)

A seminar/workshop in electroacoustics introducing composition through a series of directed studies involving tape editing, recording, musique concrète, processing of analog sounds, and analog synthesis. Other topics include history, acoustics and psycho-acoustics, recent technological developments, digital signal processing, computer applications, and MIDI. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for EAMT 205 may not take this course for credit.

EAST 211 *Theory/MIDiStration I* (3 credits)

Prerequisite: Enrolment in the Major or Minor in Electroacoustic Studies. An intensive course of music theory in practice, integrating electroacoustics and music technology through composition. Foundation music skills development takes place in a creative and technological environment using software sequencers (MIDI and audio), and music notation programs. Fundamental music training is provided through exercises and composition using instrument sampling software. References are drawn from contemporary and cross-cultural practices.

NOTE: Students who have received credit for this topic under an EAMT 398 number may not take this course for credit.

EAST 231 *Sound For Artists* (3 credits)

This course is an introduction to the study and creation of sound for artistic contexts. It includes historical and aesthetic aspects of sound utilizing current computer and studio-based technologies. Basics of sound recording, editing, and processing are covered,

as well as creative applications in installation and performance art, electronic arts, and screen-based practices. Spoken word, music (electronically/digitally generated), everyday sound and mechanically produced sounds are explored. Related topics in acoustics, hearing, and the theoretical concepts central to sound art are also introduced, in order to provide a background for effective work in sound environment.

NOTE: Students who have received credit for this topic under an EAMT 298 number may not take this course for credit.

EAST 251 Introduction to Recording I (3 credits)

An introductory study of audio technology, acoustics, perception, styles and techniques as related to sound recording. This course provides an overview of analog and digital technology with attention to its innovations, history, and effect on the practice of sound recording. There are no studio facilities assigned to this course so the work is classroom and study based.

NOTE: Students who have received credit for this topic under an EAMT 298 number may not take this course for credit.

EAST 252 Introduction to Recording II (3 credits)

Prerequisite: EAST 251. A continuation of EAST 251.

NOTE: Students who have received credit for this topic under an EAMT 298 number may not take this course for credit.

EAST 298 Special Topics in Electroacoustics (3 credits)

Prerequisite: Written permission of the Department of Music. A study of selected topics in electroacoustics.

EAST 299 Special Topics in Electroacoustics (6 credits)

Prerequisite: Written permission of the Department of Music. A study of selected topics in electroacoustics.

EAST 300 ASA and Aural Skills II (6 credits)

Prerequisite: EAST 200. This course is a continuation of EAST 200 based upon the principles of auditory scene analysis and critical listening. It extends the development of fundamental aural skills critical to students in electroacoustics. The course integrates electroacoustic analysis with music technology through detailed study of representative electroacoustic works. A number of digital studio techniques, such as envelopes, EQ, compression, reverb, and time stretching/pitch shifting, are also studied in this context.

NOTE: Students who have received credit for this topic under an EAMT 399 number may not take this course for credit.

EAST 305 Electroacoustics II (6 credits)

Prerequisite: EAST 205 or EAST 203 and 204. A seminar/workshop in electroacoustics with continued work in composition, history, and sound technology. Technological developments, computer applications, MIDI, and contemporary techniques are explored in depth through a series of directed studies involving digital signal processing, multi-track studio techniques, digital synthesis and sampling. *NOTE A/See §200.3*

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for EAMT 305 may not take this course for credit.

EAST 310 Theory/MIDlstration II (6 credits)

Prerequisite: EAST 211. A continuation of the foundation musical skills development of EAST 211.

NOTE: Students who have received credit for this topic under an EAMT 399 number may not take this course for credit.

EAST 331 Sound Art Practices (6 credits)

Prerequisite: EAST 231. A continuation of EAST 231. An intermediate-level sound art theory and production course focusing on individual or collaborative sound projects for artistic contexts such as installation and performance art, electronic arts, and screen-based practices. This course also addresses relevant reading and theoretical background.

NOTE: Students who have received credit for this topic under an EAMT 399 number may not take this course for credit.

EAST 351 Intermediate Sound Recording I (3 credits)

Prerequisite: EAST 252. An intensive seminar/workshop studying the techniques used to record and edit music in settings ranging from live concert performances to studio session recordings. Hands-on experience and aural perception is developed during ensemble rehearsal and recording sessions. Emphasis is placed on production topics such as multi-track recording, microphone placement systems, and audio processes. An understanding is developed of the language of music through basic music appreciation skills as they relate to recording and editing of music.

NOTE: Students who have received credit for this topic under an EAMT 398 number may not take this course for credit.

EAST 352 Intermediate Sound Recording II (3 credits)

Prerequisite: EAST 351. A continuation of EAST 351.

NOTE: Students who have received credit for this topic under an EAMT 398 number may not take this course for credit.

EAST 361 Current Sound Practice Seminar (3 credits)

Prerequisite: EAST 205, or EAST 203 and 204. Topics vary from year to year, but may include such elements as glitch, noise, microsound, Pl*nderphonics, collage, game sound, and ring tones.

NOTE: Students who have received credit for this topic under an EAMT 398 or 498 number may not take this course for credit.

EAST 362 *Virtual Modular Synthesis* (3 credits)

Prerequisite: EAST 205, or EAST 203 and 204. A detailed study of modular synthesis techniques and their application in live electroacoustics.

NOTE: Students who have received credit for this topic under an EAMT 398 number may not take this course for credit.

EAST 365 *Multi-channel Composition: Sound and Spaces* (3 credits)

Prerequisite: EAST 205, or EAST 203 and 204. A seminar workshop on composition for four or more channels. The topics may include fixed media presentations, sound projection techniques, and multi-channel installation art. Topics vary from year to year.

NOTE: Students who have received credit for this topic under an EAMT 398 or 498 number may not take this course for credit.

EAST 398 *Special Topics in Electroacoustics and Technology* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAST 399 *Special Topics in Electroacoustics and Technology* (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in electroacoustics and technology.

EAST 406 *Electroacoustic Composition Seminar/Workshop I* (3 credits)

Prerequisite: EAST 305. A seminar/workshop with a focus on composition for advanced students in electroacoustics. Students are encouraged to include an interdisciplinary component in their final project. *NOTE C/See §200.3*

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for EAMT 406 may not take this course for credit.

EAST 407 *Electroacoustic Composition Seminar/Workshop II* (3 credits)

Prerequisite: EAST 406. A continuation of EAST 406.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for EAMT 407 may not take this course for credit.

EAST 451 *Advanced Recording I* (3 credits)

Prerequisite: EAST 352. A continuation of EAST 352. Emphasis is on advanced independent projects.

NOTE: Students who have received credit for EAMT 451 may not take this course for credit.

EAST 452 *Advanced Recording II* (3 credits)

Prerequisite: EAST 451. A continuation of EAST 451.

NOTE: Students who have received credit for EAMT 452 may not take this course for credit.

EAST 460 *Recording in Practice* (3 credits)

Prerequisite: Enrolment in the Major in Electroacoustic Studies; EAST 452. An advanced course in applied recording arts. This is a full-year course.

NOTE: Students who have received credit for this topic under an EAMT 498 number may not take this course for credit.

EAST 461 *Capstone Project Seminar I* (3 credits)

Prerequisite: Enrolment in the Major or Minor in Electroacoustic Studies; EAST 305; 60 credits completed in the program. An open seminar/workshop environment where students are encouraged to work in a collaborative, cross-discipline or multicultural fashion.

NOTE: Students who have received credit for this topic under an EAMT 498 number may not take this course for credit.

EAST 462 *Capstone Project Seminar II* (3 credits)

Prerequisite: Enrolment in the Major or Minor in Electroacoustic Studies; EAST 305; 60 credits completed in the program. A continuation of EAST 461.

NOTE: Students who have received credit for this topic under an EAMT 498 number may not take this course for credit.

EAST 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of electroacoustics and/or music technology.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

EAST 472* *Independent Study II* (3 credits)

Prerequisite: EAST 471 and written permission of the Department of Music.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

EAST 498 *Special Topics in Electroacoustics and Technology* (3 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in electroacoustics and technology.

EAST 499 *Special Topics in Electroacoustics and Technology* (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in electroacoustics and technology.

Integrative Music Studies:

INMS 209 *Aural Perception I* (3 credits)

Prerequisite: MUSI 200 or exemption. A course designed to develop the musical ear through intermediate-level sight-singing, dictation, aural analysis, and keyboard skills. Classroom and laboratory.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 499 or MUSI 210 may not take this course for credit.

INMS 210 *Aural Perception II* (3 credits)

Prerequisite: INMS 209 or equivalent. A continuation of the development of the musical ear through intermediate-level sight-singing, dictation, aural analysis, and keyboard skills. Classroom and laboratory. *NOTE A/See §200.3*

NOTE: Students who have received credit for this topic under INMS 310 may not take this course for credit.

INMS 251 *Melody and Counterpoint* (3 credits)

Prerequisite: MUSI 200 or equivalent. An introduction to the basic elements of melodic construction and contrapuntal technique, with reference to a variety of genres, studied through analysis and composition.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 250, 499 or MUSI 210 may not take this course for credit.

INMS 252 *Harmony I* (3 credits)

Prerequisite: MUSI 200 or equivalent. An introduction to the basic and intermediate principles of harmonic progressions and voice-leading within the tonal system, with reference to a variety of styles and genres, studied through analysis and composition.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credit for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 250, 499 or MUSI 210 may not take this course for credit.

INMS 298 *Special Topics in Integrative Music Studies* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in INMS.

INMS 311 *Aural Perception III* (3 credits)

Prerequisite: INMS 210 or equivalent. A continuation of aural perception development through sight-singing, dictation, transcription and aural analysis. Classroom and laboratory. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 310 may not take this course for credit.

INMS 320 *Comparative Analysis I* (6 credits)

Prerequisite: INMS 351 or exemption. Development of analytical methodology. Study of selected works representing various forms and styles from different historical periods. *NOTE A/See §200.3*

INMS 351 *Analysis* (3 credits)

Prerequisite: INMS 252. An introduction to analytical techniques relating to form, motivic development, and texture, with reference to a variety of styles and genres. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 350 may not take this course for credit.

INMS 352 *Harmony II* (3 credits)

Prerequisite: INMS 252. A continuation of the study of harmonic progressions and voice-leading within the expanded tonal system, with reference to a variety of styles and genres, studied through analysis and composition.

NOTE: Students who have received credit for this topic under INMS 350 may not take this course for credit.

INMS 398 *Special Topics in Music Theory/Composition* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 399 *Special Topics in Music Theory/Composition* (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 410 *Advanced Aural Training* (6 credits)

Prerequisite: MUSI 312 or exemption. An intensive study of selected problems in hearing, analyzing, and transcribing music. The course combines individual and group exercises. *NOTE A/See §200.3*

INMS 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music theory, analysis, aural perception, orchestration, and/or related disciplines, and involves consultation with an advisor. *NOTE C/See §200.3*

**Students may count a maximum of nine credits in independent studies towards their degree program.*

INMS 472* Independent Study II (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating INMS 471 registers for INMS 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

INMS 498 Special Topics in Music Theory/Composition (3 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

INMS 499 Special Topics in Music Theory/Composition (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced study of a selected area not available in other courses in theory, aural perception, composition, or orchestration.

Jazz Studies:

JAZZ 200 The Language of Jazz (6 credits)

Prerequisite: Enrolment in a major or specialization program in the Department of Music. An introduction to the syntax, style, aesthetics, and sociology of jazz. The complete spectrum of styles and artists serves as the basis of materials for the course.

JAZZ 298 Special Topics in Jazz Studies (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in jazz studies.

JAZZ 301 Jazz Harmony (3 credits)

Prerequisite: JAZZ 200; MUSI 200; or exemptions. The basics of jazz harmony.

NOTE: Students who have received credit for this topic under an INMS 498 number may not take this course for credit.

JAZZ 302 Jazz Arranging I (3 credits)

Prerequisite: JAZZ 301. The introductory study of writing arrangements based upon compositions from the American popular song and jazz repertoires for small and medium-size jazz ensembles. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 332 may not take this course for credit.

JAZZ 305 Jazz Composition I (6 credits)

Prerequisite: JAZZ 302. A seminar/workshop in jazz composition. After an examination of components of composition from the jazz repertoire, students write original music based on the blues, American popular song forms, and such idioms as those in the style of bebop, bossa nova, ragtime, and modal jazz. *NOTE A/See §200.3*

NOTE: Students who have received credit for CMUS 330 may not take this course for credit.

JAZZ 398 Special Topics in Jazz Studies (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 399 Special Topics in Jazz Studies (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 401 Jazz Arranging II (3 credits)

Prerequisite: JAZZ 302. The continued study of writing arrangements for large ensembles including original compositions and jazz repertoire. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 431 may not take this course for credit.

JAZZ 402 Jazz Arranging III (3 credits)

Prerequisite: JAZZ 401. The study of advanced techniques in jazz arranging. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 432 may not take this course for credit.

JAZZ 405 Jazz Composition II (6 credits)

Prerequisite: JAZZ 305. A continuation of JAZZ 305. *NOTE A/See §200.3*

NOTE: Students who have received credit for CMUS 430 may not take this course for credit.

JAZZ 471 Independent Study I** (3 credits)

Prerequisite: Second-year standing*, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of jazz studies. *NOTE C/See §200.3*

**66 or fewer credits remaining in degree program.*

***Students may count a maximum of nine credits in independent studies towards their degree program.*

JAZZ 472 Independent Study II** (3 credits)

Prerequisite: JAZZ 471, second-year standing*, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, that focuses on an area of jazz studies. *NOTE C/See §200.3*

**66 or fewer credits remaining in degree program.*

***Students may count a maximum of nine credits in independent studies towards their degree program.*

JAZZ 498 *Special Topics in Jazz Studies* (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

JAZZ 499 *Special Topics in Jazz Studies* (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of jazz outside the scope of existing courses.

Jazz Performance:

JPER 220 *Jazz Ensemble I* (6 credits)

Prerequisite: JAZZ 200 previously or concurrently. A performance course in which students participate in various Concordia jazz ensembles. *NOTE A/See §200.3*

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 300 may not take this course for credit.

JPER 298 *Special Topics in Jazz Performance* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in jazz performance.

JPER 321 *Jazz Ensemble II* (3 credits)

Prerequisite: JPER 220. A continuation of JPER 220. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 401 may not take this course for credit.

JPER 330 *Jazz Improvisation I* (6 credits)

Prerequisite: JAZZ 301 previously or concurrently; JAZZ 200. A performance-analysis course that examines the craft of jazz improvisation. A broad spectrum of jazz improvisational styles is examined. Participation in public performance is required.

NOTE: Students who have received credit for MPER 330 may not take this course for credit.

JPER 341 *Jazz Vocal Repertoire I* (3 credits)

Prerequisite: JAZZ 200; MPER 251 in voice previously or concurrently. A study of jazz vocal technique through performance of representative compositions and arrangements, and study of professional recordings illustrative of various jazz vocal styles. Special focus is on performance styles as they relate to building audience-performer relationships. Students are expected to participate in public performances.

NOTE: Students who have received credit for this topic under a MPER 498 number may not take this course for credit.

JPER 398 *Special Topics in Jazz Performance* (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A study of a selected area not available in other courses in jazz performance.

JPER 399 *Special Topics in Jazz Performance* (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. A study of a selected area not available in other courses in jazz performance.

JPER 421 *Jazz Ensemble III* (3 credits)

Prerequisite: JPER 321. A continuation of JPER 321. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

NOTE: Students who have received credit for CMUS 402 may not take this course for credit.

JPER 422 *Jazz Ensemble IV* (3 credits)

Prerequisite: JPER 421. A continuation of JPER 421. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students are required to participate in public performances.

JPER 430 *Jazz Improvisation II* (6 credits)

Prerequisite: JPER 330. A continuation of JPER 330.

NOTE: Students who have received credit for MPER 430 may not take this course for credit.

JPER 441 *Jazz Vocal Repertoire II* (3 credits)

Prerequisite: JPER 341. A continuation of JPER 341.

NOTE: Students who have received credit for this topic under a MPER 498 number may not take this course for credit.

JPER 471 Independent Study I** (3 credits)

Prerequisite: Second-year standing* or equivalent, and written permission of the Department of Music. A student-designed course of study, approved by an advisor, on an area of jazz performance practice. When appropriate, the study may include a performance.

*66 or fewer credits remaining in degree program.

**Students may count a maximum of nine credits in independent studies towards their degree program.

JPER 472* Independent Study II (3 credits)

Prerequisite: JPER 471 and written permission of the Department of Music. A student repeating JPER 471 registers for JPER 472 for credit.

*Students may count a maximum of nine credits in independent studies towards their degree program.

JPER 498 Special Topics in Jazz Performance (3 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

JPER 499 Special Topics in Jazz Performance (6 credits)

Prerequisite: JAZZ 200 or exemption, and written permission of the Department of Music. An advanced study of a selected area not available in other courses in jazz performance.

Music History:**MHIS 200 Music History and Society** (6 credits)

A survey of musical styles in their social context, from pre-history to the present day. While emphasis is on the mainstream of the Western tradition, attention is also given to folk, popular, and jazz styles, as well as to the music of other cultures.

NOTE A/See §200.3

NOTE: Students who have received credit for MHIS 201 or 202, or for this topic under a MHIS 498 number may not take this course for credit.

MHIS 201 18th- and 19th-Century Music History (3 credits)

A survey of musical styles in their social context, taken from the 18th- and 19th-century traditions. While emphasis is on the mainstream of the Western tradition, attention is also given to folk and popular music, as well as to the music of other cultures.

NOTE: This course is the first half of MHIS 200. It is not available to students enrolled in any program offered by the Department of Music.

NOTE: Students who have received credit for MHIS 200 or for this topic under a MHIS 498 number may not take this course for credit.

MHIS 202 Early and 20th-Century Music History (3 credits)

A survey of musical styles in their social context, taken from the Medieval, Renaissance, and Baroque periods as well as the 20th century to the present day. While emphasis is on the mainstream of the Western tradition, attention is also given to folk, popular, and jazz styles, as well as to the music of other cultures.

NOTE: This course is the second half of MHIS 200. It is not available to students enrolled in any program offered by the Department of Music.

NOTE: Students who have received credit for MHIS 200 or for this topic under a MHIS 498 number may not take this course for credit.

MHIS 221 Rock and Roll and Its Roots (3 credits)

A study of the history, traditions, styles, and musical trends of rock and roll.

NOTE: Students who have received credit for this topic under a MUSI 265 or 398 number may not take this course for credit.

MHIS 241 Special Topics in Electroacoustics — Edison to iPod (3 credits)

A lecture course focusing on the history and impact of sound from the loudspeaker.

NOTE: Students who have received credit for this topic under a MHIS 398 number may not take this course for credit.

MHIS 298 Special Topics in Music History (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music history.

MHIS 301 Medieval and Renaissance Music (3 credits)

Prerequisite: MHIS 200; MUSI 209, 251, 252. The development of the basic patterns of Western music is traced through the Middle Ages. The resulting musical styles from the mid-15th to the end of the 16th century are examined in the context of the cultural changes which shaped the humanistic age.

NOTE: Students who have received credit for MHIS 311 or 312 may not take this course for credit.

MHIS 302 Music of the Baroque (3 credits)

Prerequisite: MHIS 200; MUSI 209, 251, 252. Representative works from the early-17th to the mid-18th century. The evolution of "common practice" is traced in the forms, styles, and performance practices of the great masters and schools.

MHIS 303 *Classical and Early Romantic Music* (3 credits)

Prerequisite: MHIS 200; MUSI 209, 251, 252. A study of late-18th- and early-19th-century music. Representative works will be studied from the late Rococo, through the age of Haydn, Mozart, and Beethoven, and into the early Romantic style of Schubert.

MHIS 304 *Romanticism in Music* (3 credits)

Prerequisite: MHIS 200; MUSI 209, 251, 252. A study of the music of the 19th and early-20th century. Representative works, styles and performance practices are studied as expressions of the romantic consciousness.

MHIS 305 *Music from the Post-Romantic to the Present* (3 credits)

Prerequisite: MHIS 200; MUSI 209, 251, 252. A study of music from the early-20th century to the present. The roots of current trends in music are followed through their growth into the widely diverse styles of today.

MHIS 312 *The Ellington Era* (3 credits)

Prerequisite: MHIS 314. The study of the life and music of Edward Kennedy Duke Ellington.

NOTE: Students who have received credit for this topic under a MHIS 498 number may not take this course for credit.

MHIS 313 *American Popular Song* (3 credits)

Prerequisite: MHIS 314. A survey of the composers, lyricists, and performers of American popular song from 1900 to 1950 through the study of works by masters of the genre such as Gershwin, Porter, Berlin, and Arlen.

NOTE: Students who have received credit for this topic under a MHIS 498 number may not take this course for credit.

MHIS 314 *Jazz History* (3 credits)

Prerequisite: MHIS 200. A study of the historical developments and the personalities that contributed to the evolution of jazz styles.

MHIS 315 *Women in Music History* (3 credits)

Prerequisite: Second-year standing* or written permission of the Department of Music. A study of women's contribution to music and the perception of women's roles in music history. This course explores both the historic and current situation of women in music through discussion of women's participation in musical life and the ways women are depicted in music. Topics are not limited to the Western art tradition only, but range widely through other cultures, raising issues such as ritual and lament, spirituality, power, and social class. Readings, listening, guests, and the student's own experiences complement the lectures and discussions.

NOTE: Students who have received credit for this topic under a MHIS 498 number may not take this course for credit.

**66 or fewer credits remaining in degree program.*

MHIS 316 *The Modern Jazz Orchestra* (3 credits)

Prerequisite: MHIS 314. A survey of big band jazz music from 1943 to the present, beginning with Duke Ellington's epic composition "Black, Brown and Beige."

NOTE: Students who have received credit for this topic under a MHIS 498 number may not take this course for credit.

MHIS 317 *The Music of Charles Mingus* (3 credits)

Prerequisite: MHIS 314. The study of the life and music of Charles Mingus.

NOTE: Students who have received credit for this topic under a MHIS 498 number may not take this course for credit.

MHIS 331 *Aesthetics and Musical Styles* (3 credits)

Prerequisite: MHIS 200 or exemption. A survey and exploration of thought and writings on the meaning, intent, practice, and appreciation of music and its various manifestations in different cultures or eras, aiming to provide students with the tools and background to think deeply about the meaning and direction of musical language.

MHIS 398 *Special Topics in Music History* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music history.

MHIS 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of music history and/or related disciplines, and involves consultation with an advisor. *NOTE C/See §200.3*

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MHIS 472* *Independent Study II* (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating MHIS 471 registers for MHIS 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MHIS 498 *Special Topics in Music History* (3 credits)

Prerequisite: 12 credits in Music and written permission of the Department of Music. A study of a selected period, area, or contribution. In a given year, the study may examine any significant aspect of Western, non-Western, or other musics.

NOTE C/See §200.3

Music Performance Studies:

MPER 201 *Orchestra I* (3 credits)

Prerequisite: Written permission of the Department of Music. Students enrolled in this course participate in a large orchestral ensemble. For evaluation, a supervising full-time professor will observe a minimum of two rehearsals and/or performances, and may consult with the ensemble director.

NOTE: This is a full-year course.

MPER 223 *Contemporary Music Ensemble I* (3 credits)

Prerequisite: Enrolment in the Department of Music or written permission of the Department of Music. A performance course based on weekly rehearsals leading to a final concert, open to all instrumentalists and singers, and focusing upon contemporary chamber music or other current musical practices.

NOTE: Auditions are held during the first class and students who do not pass the audition will be required to withdraw from the course prior to the DNE deadline.

NOTE: Students who have received credit for this topic under a MPER 398 number may not take this course for credit.

MPER 231 *Choir I* (3 credits)

Students enrolled in this course participate in a Concordia choir. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students who have received credit for MPER 221 may not take this course for credit.

MPER 251 *Private Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's program.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

NOTE: Students who have received credit for this topic under MUSI 230 or 231 may not take this course for credit.

MPER 252 *Private Study II* (3 credits)

Prerequisite: MPER 251 and written permission of the Department of Music. A continuation of MPER 251.

NOTE: Students who have received credit for this topic under MUSI 232 may not take this course for credit.

MPER 298 *Special Topics in Music Performance* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 301 *Orchestra II* (3 credits)

Prerequisite: MPER 201 or written permission of the Department of Music. A continuation of MPER 201. Students enrolled in this course participate in a large orchestral ensemble. For evaluation, a supervising full-time professor will observe a minimum of two rehearsals and/or performances, and may consult with the ensemble director. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 300 or 498 or may not take this course for credit.

MPER 321 *Chamber Ensemble I* (3 credits)

A study, through performance, of selected works from a broad range of repertoires. The works studied are determined by class needs and the particular skills of each student. Participation in public performances is required. *NOTE A/See §200.3*

NOTE: This is a full-year course.

MPER 322 *Chamber Ensemble II* (3 credits)

Prerequisite: MPER 321. A continuation of MPER 321. *NOTE A/See §200.3*

NOTE: This is a full-year course.

MPER 323 *Contemporary Music Ensemble II* (3 credits)

Prerequisite: MPER 223. A continuation of MPER 223.

NOTE: Auditions are held during the first class and students who do not pass the audition will be required to withdraw from the course prior to the DNE deadline.

MPER 331 *Classical Vocal Repertoire I* (3 credits)

Prerequisite: MUSI 200; MPER 251 in voice previously or concurrently. A chronological study of the repertoire available to the solo singer. Vocal repertoire from the late Renaissance to the present is examined and performed by students. This seminar/workshop is based on a bibliography of selected readings, covering such topics as stylistic features, treatment of poetry and text, recital preparation, programming, vocal ornamentation, and recitative.

NOTE: This is a full-year course.

NOTE: Students who have received credit for this topic under a MPER 498 number may not take this course for credit.

MPER 332 Choir II (3 credits)

Prerequisite: MPER 231. A continuation of MPER 231. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 351 Private Study III (3 credits)

Prerequisite: MPER 252; second-year standing*; written permission of the Department of Music. A continuation of MPER 252.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

NOTE: Students who have received credit for this topic under MUSI 330 or 331 may not take this course for credit.

**66 or fewer credits remaining in degree program.*

MPER 352 Private Study IV (3 credits)

Prerequisite: MPER 351 and written permission of the Department of Music. A continuation of MPER 351.

NOTE: Students who have received credit for this topic under MUSI 330 or 332 may not take this course for credit.

MPER 361 Transdisciplinary Creation and Performance (3 credits)

Prerequisite: Second-year standing* or written permission of the Department of Music. A workshop on radical ways of expanding contemporary music and the connection with other disciplines (dance, theatre, film, architecture, biology, engineering, and more), through hands-on experimentation, creation, and performance with interdisciplinarity and transdisciplinarity as one of the core values.

**66 or fewer credits remaining in degree program.*

MPER 370 Musical Performance Skills I (6 credits)

Prerequisite: MUSI 200; INMS 209. A seminar/ workshop on specific problems in learning, teaching, and developing musical performance skills. Included is the analysis and organization of practice technique, reading, memory, performance practices, style, interpretation, accompaniment, and recital preparation. Particular attention is given to the integration of skill with musical understanding. *NOTE A/See §200.3*

MPER 390 Advanced Private Study I (6 credits)

Prerequisite: MPER 251, 252; enrolment in the Specialization in Music Performance Studies; written permission of the Department of Music. This course offers intensive vocal or instrumental instruction for students specializing in performance. A juried examination is required. *NOTE A/See §200.3*

NOTE: Students are required to bear part of the cost of private lessons.

NOTE: Students who have received credit for MUSI 330 may not take this course for credit.

MPER 398 Special Topics in Music Performance (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 399 Special Topics in Music Performance (6 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music performance.

MPER 401 Orchestra III (3 credits)

Prerequisite: MPER 301; written permission of the Department of Music. A continuation of MPER 301. Students enrolled in this course participate in a large orchestral ensemble. For evaluation, a supervising full-time professor will observe a minimum of two rehearsals and/or performances, and may consult with the ensemble director. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 400 or 498 may not take this course for credit.

MPER 421 Chamber Ensemble III (3 credits)

Prerequisite: MPER 322. A continuation of MPER 322. *NOTE A/See §200.3*

NOTE: This is a full-year course.

MPER 422 Chamber Ensemble IV (3 credits)

Prerequisite: MPER 421. A continuation of MPER 421. *NOTE A/See §200.3*

NOTE: This is a full-year course.

MPER 423 Contemporary Music Ensemble III (3 credits)

Prerequisite: MPER 323. A continuation of MPER 323.

NOTE: Auditions are held during the first class and students who do not pass the audition will be required to withdraw from the course prior to the DNE deadline.

MPER 431 Classical Vocal Repertoire II (3 credits)

Prerequisite: MPER 331. A continuation of MPER 331.

NOTE: This is a full-year course.

NOTE: Students who have received credit for this topic under a MPER 498 number may not take this course for credit.

MPER 432 *Choir III* (3 credits)

Prerequisite: MPER 331. A continuation of MPER 331. *NOTE A/See §200.3*

NOTE: This is a full-year course.

NOTE: Students who have received credit for this course as MPER 498 or MPER 420 may not take this course for credit.

MPER 441 *Performance Practice/ Documentation* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of historical sources applied directly to performance. Topics covered include ornamentation, improvisation, figured bass, "The Doctrine of the Affections," early notation, and bibliography.

MPER 442 *Performance Practice/ Documentation* (3 credits)

Prerequisite: MPER 441. A continuation of MPER 441.

MPER 451 *Private Study V* (3 credits)

Prerequisite: MPER 352; third-year standing in one of the Music specializations; and written permission of the Department of Music. A continuation of MPER 352.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

NOTE: Students who have received credit for this topic under MUSI 430 or 431 may not take this course for credit.

**33 or fewer credits remaining in degree program.*

MPER 452 *Private Study VI* (3 credits)

Prerequisite: MPER 451 and written permission of the Department of Music. Enrolment in one of the Music specializations. A continuation of MPER 451.

NOTE: Students who have received credit for this topic under MUSI 430 or 432 may not take this course for credit.

MPER 470 *Musical Performance Skills II* (6 credits)

Prerequisite: MPER 370. A continuation of MPER 370. *NOTE A/See §200.3*

MPER 471* *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Music. A student-designed course of study that focuses on an approved area(s) of performance practice, performance theory/analysis, pedagogy, and/or related disciplines, and involves consultation with an advisor. When appropriate, the study may include a demonstration/performance. *NOTE C/See §200.3*

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MPER 472* *Independent Study II* (3 credits)

Prerequisite: Written permission of the Department of Music. A student repeating MPER 471 registers for MPER 472 for credit.

**Students may count a maximum of nine credits in independent studies towards their degree program.*

MPER 490 *Advanced Private Study II* (6 credits)

Prerequisite: MPER 351, 352 or MPER 390; enrolment in the Specialization in Music Performance Studies; third-year standing*; written permission of the Department of Music. A continuation of MPER 390. An approved public recital may be substituted for the juried examination. *NOTE A/See §200.3*

NOTE: Students are required to bear part of the cost of private lessons.

**33 or fewer credits remaining in degree program.*

MPER 498 *Special Topics in Music Performance* (3 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics in any given year may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student. *NOTE A, C/See §200.3*

MPER 499 *Special Topics in Music Performance* (6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in performance. Selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of the students. Topics, in any given year, may include technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student. *NOTE A, C/See §200.3*

Music:

MUSI 200 *Music Literacy and Keyboard Skills* (6 credits)

An intensive introductory course in basic musical materials, with integrated practice in aural training and keyboard skills.

NOTE: Students in a major, minor, or specialization program in the Department of Music (excluding the Major and Minor in Electroacoustic Studies) may not take this course for credit.

NOTE: Students who have received credit for this topic under INMS 499 may not take this course for credit.

MUSI 211 *Aural Perception I* (3 credits)

Prerequisite: Enrolment in a Department of Music program; written permission of the Department. A course designed to develop the musical ear through intermediate-level sight-singing, dictation, aural analysis, and keyboard skills. The study of aural perception is

done through a combination of classroom lectures and workshops.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 209, 499, or MUSI 210 may not take this course for credit.

MUSI 212 Aural Perception II (3 credits)

Prerequisite: MUSI 211. A continuation of the development of the musical ear through intermediate-level sight-singing, dictation, aural analysis, and keyboard skills. The study of aural perception is done through a combination of classroom lectures and workshops. *NOTE A/See §200.3*

NOTE: Students who have received credit for this topic under INMS 210 or 310 may not take this course for credit.

MUSI 223 Understanding Music (3 credits)

A course in analytical listening for the student who has little or no musical background. The works studied represent the major styles and idioms of Western music. *NOTE A/See §200.3*

NOTE: Students in a major, minor, or specialization program in the Department of Music may not take this course for credit towards their degree.

NOTE: Students are limited to a maximum of 18 credits in Private Study.

MUSI 230 Private Study I (6 credits)

Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music coordinated with the student's program. *NOTE A/See §200.3*

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI 241 Functional Keyboard Skills (3 credits)

Prerequisite: Enrolment in a Department of Music program; written permission of the Department. Open to all students whose principal instrument is not piano. Registration priority is given to students enrolled in the BFA Major in Music. A workshop/laboratory that aims to develop and solidify fundamental and functional piano skills.

MUSI 242 Functional Guitar Skills (3 credits)

Prerequisite: Enrolment in a Department of Music program, or written permission of the Department. Open to all students whose principal instrument is not guitar. Registration priority is given to students enrolled in the BFA Major in Music. A workshop/laboratory that aims to develop and solidify fundamental and functional guitar skills.

MUSI 243 Functional Vocal Skills (3 credits)

Prerequisite: Enrolment in a Department of Music program; written permission of the Department. Open to all students whose principal instrument is not voice. Registration priority is given to students enrolled in the BFA Major in Music. A workshop/laboratory that aims to develop and solidify fundamental and functional vocal skills.

MUSI 251 Harmony I (3 credits)

Prerequisite: Enrolment in a Department of Music program; written permission of the Department. An introduction to the basic and intermediate principles of harmonic progressions and voice-leading within the tonal system, with reference to a variety of styles and genres, studied through analysis and composition.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credit for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 250, 252, 499, or MUSI 210 may not take this course for credit.

MUSI 252 Melody and Counterpoint (3 credits)

Prerequisite: Enrolment in a Department of Music program; written permission of the Department. An introduction to the basic elements of melodic construction and contrapuntal technique, with reference to a variety of genres, studied through analysis and composition.

NOTE: Students enrolled in any specialization offered by the Department of Music may not apply credits for this course towards the 90-credit degree requirements.

NOTE: Students who have received credit for this topic under INMS 250, 251, 499 or MUSI 210 may not take this course for credit.

MUSI 261 Music Composition I (3 credits)

Prerequisite: Written permission of the Department of Music. A seminar and workshop in composition, introducing students to compositional techniques from the classical and contemporary eras. Emphasis is placed on the development of the individual's composition skills through the realization of short compositional exercises for solo instruments or small ensembles.

NOTE A/See §200.3

NOTE: Students who have received credit for INMS 360 may not take this course for credit.

MUSI 262 Music Composition II (3 credits)

Prerequisite: MUSI 261; written permission of the Department of Music. A seminar and workshop in composition, completing the introduction to compositional techniques from the classical and contemporary eras. Emphasis is placed on the development of the individual's composition skills through the writing of short musical pieces for solo instruments or small ensembles.

NOTE A/See §200.3

NOTE: Students who have received credit for INMS 360 may not take this course for credit.

MUSI 263 *Songwriting I* (3 credits)

Prerequisite: MUSI 211, 251. A course that allows students to explore and develop their skills through regular songwriting as well as critical analysis of existing songs.

MUSI 264 *Songwriting II* (3 credits)

Prerequisite: MUSI 263. A continuation of MUSI 263. This course allows students to further explore the development of a personal approach to songwriting and to prepare and present a portfolio of their work.

MUSI 298 *Special Topics in Music* (3 credits)

Prerequisite: Written permission of the Department of Music. A study of a selected area not available in other courses in music.

MUSI 311 *Aural Perception III* (3 credits)

Prerequisite: MUSI 210 or equivalent. A continuation of aural perception development through sight-singing, dictation, transcription, and aural analysis. The study of aural perception is done through a combination of classroom lectures and workshops.

NOTE A/See §200.3

NOTE: Students who have received credit for INMS 310 or 311 may not take this course for credit.

MUSI 312 *Aural Perception IV* (3 credits)

Prerequisite: INMS 311 or MUSI 311. A course in advanced aural perception development through sight-singing, dictation, transcription and aural analysis. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 312 may not take this course for credit.

MUSI 321 *Art of Managing Your Career* (3 credits)

A hands-on and practical course that gives growing artists the business and promotional tools that are a necessary part of today's artistic environment. Registration in this course may require a short internship as part of the course requirements.

NOTE: Students who have received credit for this topic under a MUSI 398 number may not take this course for credit.

MUSI 322 *New Music and Media Arts* (3 credits)

Prerequisite: Written permission of the Department of Music. An introduction to the practice and theory of contemporary sound-based art, new music expressions, and the media arts. This course explores the diversity of creative approaches, from the early 20th century to the present and the students' creative application of these approaches.

NOTE: Students who have received credit for this topic under a MUSI 398 number may not take this course for credit.

MUSI 330 *Private Study II* (6 credits)

Prerequisite: MUSI 230 or MPER 251 or MPER 252; second-year standing*; written permission of the Department of Music.

A continuation of MUSI 230. *NOTE A/See §200.3*

NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 390.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

**66 or fewer credits remaining in degree program.*

MUSI 351 *Analysis* (3 credits)

Prerequisite: MUSI 252. An introduction to analytical techniques relating to form, motivic development, and texture, with reference to a variety of styles and genres. This course also aims to develop critical thinking through the introduction to contemporary analytical approaches that may include disciplines such as semiology or hermeneutics. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 350 or 351 may not take this course for credit.

MUSI 352 *Harmony II* (3 credits)

Prerequisite: MUSI 252. A continuation of the study of harmonic progressions and voice-leading within the expanded tonal system, with reference to a variety of styles and genres, studied through analysis and composition.

NOTE: Students who have received credit for this topic under INMS 350 or 352 may not take this course for credit.

MUSI 353 *Creative Counterpoint* (3 credits)

Prerequisite: MUSI 251, 252. This course explores fugal and contrapuntal techniques found in contemporary music, pop and indie music, film, theatre and game music, and in music of other cultures. This course may include elements of performance and/or improvisation.

NOTE: Students who have received credit for this topic or "Intermediate Counterpoint" under an INMS 398 number may not take this course for credit.

MUSI 361 *Music Composition III* (3 credits)

Prerequisite: MUSI 262; written permission of the Department of Music. A seminar and workshop in composition, furthering the development of the individual's composition skills and beginning to cultivate a personal musical language and style through the writing of larger musical pieces. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 460 may not take this course for credit.

MUSI 362 *Music Composition IV* (3 credits)

Prerequisite: MUSI 361; written permission of the Department of Music. A seminar and workshop in composition, furthering the development of the individual's composition skills and beginning to cultivate a personal musical language and style through the writing of larger musical pieces. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 460 may not take this course for credit.

MUSI 363 *Songwriting II* (3 credits)

Prerequisite: MUSI 263. A continuation of MUSI 263. This course allows students to further explore the development of a personal approach to songwriting and to prepare and present a portfolio of their work.

MUSI 364 *Acoustic Instrumentation and Orchestration* (3 credits)

Prerequisite: MUSI 210, 251, 252. This course covers the fundamental elements of writing for acoustic instruments and for the combination of acoustic instruments in various ensembles and in a variety of genres including classical, contemporary art music, pop, and indie.

NOTE: Students who have received credit for this topic or "Orchestration" under an INMS 398 number may not take this course for credit.

MUSI 365 *Electronic Instrumentation and Orchestration* (3 credits)

Prerequisite: MUSI 210, 251, 252. This course covers the fundamental elements of writing for electronic and amplified instruments and for the combination of these instruments in various ensembles and in a variety of pitch-based genres including contemporary art music, pop and indie.

MUSI 398 *Special Topics in Music* (3 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 399 *Special Topics in Music* (6 credits)

Prerequisite: Written permission of the Department of Music. A seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 401 *Capstone Seminar and Project* (6 credits)

Prerequisite: 60 credits completed in the BFA Major in Music program. A seminar exploring various strategies, aesthetics, methodologies, and resources for creating and for realizing the final creative and/or research-oriented project (the Capstone Project), followed by a workshop and final realization/presentation of the project. Students are encouraged to work in a collaborative, cross-discipline, and/or multicultural fashion.

MUSI 421 *Research in Music* (3 credits)

Prerequisite: Written permission of the Department of Music. A survey seminar based upon readings and practical applications of research in music, including psychology and neuroscience of music, historical/musicological approaches and research-creation in music.

NOTE: Students who have received credit for this topic or "Survey of Research in Music Perception and Cognition" under a MUSI 498 number may not take this course for credit.

MUSI 430 *Private Study III* (6 credits)

Prerequisite: MUSI 330 or MPER 351 or MPER 352; third-year standing*; written permission of the Department of Music. A continuation of MUSI 330. *NOTE A/See §200.3*

NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER 490.

NOTE: Students are required to assume part of the cost of private lessons.

NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

**33 or fewer credits remaining in degree program.*

MUSI 451 *Advanced Theoretical Studies I* (3 credits)

Prerequisite: INMS 351, 352 or MUSI 351, 352. Advanced study of principles and elements of music theory, especially within the tonal and modal contexts. Studied topics may include harmony, counterpoint, and analysis. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 300 or 451 may not take this course for credit.

MUSI 452 *Advanced Theoretical Studies II* (3 credits)

Prerequisite: MUSI 451. An advanced study of principles and elements of music theory, especially within the atonal context and 20th-century techniques. *NOTE A/See §200.3*

NOTE: Students who have received credit for INMS 450 or 452 may not take this course for credit.

MUSI 461 *Music Composition V* (3 credits)

Prerequisite: MUSI 362 and enrolment in the Specialization in Music Composition, or written permission of the Department of Music. A seminar and workshop in composition, furthering the development of the individual's composition skills and personal musical language and style through the writing of large musical pieces and/or conception of large-scale musical projects. Workshops may include individual tutoring. *NOTE A/See §200.3*

NOTE: Students who have received credit for this topic under an INMS 499 number may not take this course for credit.

MUSI 462 *Music Composition VI* (3 credits)

Prerequisite: MUSI 461 and enrolment in the Specialization in Music Composition; written permission of the Department of Music. A final seminar and workshop in composition, furthering the development of the individual's composition skills and personal musical language and style through the writing of large musical pieces and/or conception of large-scale musical projects. Workshops may include individual tutoring. *NOTE A/See §200.3*

NOTE: Students who have received credit for this topic under an INMS 499 number may not take this course for credit.

MUSI 491 *Special Project in Music* (3 credits)

Prerequisite: Written permission of the Department of Music. This course affords an opportunity for extensive development of a project under the direction of a faculty member. Students submit a project proposal in accordance with the regulations for admission to the specialization.

NOTE: Students repeating MUSI 491 register for MUSI 492 for credit provided the subject matter is different.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 492 *Special Project in Music* (3 credits)

Prerequisite: MUSI 491. A continuation of MUSI 491.

NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI 498 *Special Topics in Music* (3 credits)

Prerequisite: Written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

MUSI 499 *Special Topics in Music* (6 credits)

Prerequisite: Written permission of the Department of Music. An advanced seminar/workshop in an area of music which provides an opportunity for the study of specialized aspects of music outside the scope of existing courses.

81.110

STUDIO ARTS

Faculty

Chair

JANET WERNER, MFA Yale, Associate Professor

Professors

RAYMONDE APRIL, BA Laval, Provost's Distinction

TIM CLARK, MFA MA C'dia.

ANDREW DUTKEWYCH, MFA Slade Sch.

TREVOR GOULD, MA Car.

BARBARA LAYNE, MFA Kan.

FRANÇOIS MORELLI, MFA Rutgers

LEOPOLD PLOTEK, MFA Slade Sch.

BILL VORN, PhD U.Q.A.M.

Associate Professors

GISELE AMANTEA, MFA Puget Sound (Wash.)

INGRID BACHMANN, MA Art Inst.Chic.

SHAWN BAILEY, MFA York (Can.)

ELEANOR BOND, BFA Manit.

GENEVIÈVE CADIEUX, BA Ott., Provost's Distinction

DAVID ELLIOTT, MFA C'dia.

EVERGON, MFA Roch.Inst.Tech.

JUDY GARFIN, MFA Hoffenberger Sch., Baltimore

ELIZA GRIFFITHS, BFA C'dia.

LYNN HUGHES, Advanced Dip Vancouver Sch.Art

DANICA JOJICH, MFA N.S.C.A.D.

ERIN MANNING, PhD Hawaii

LUANNE MARTINEAU, MFA Br.Col.

MARISA PORTOLESE, MFA C'dia.

ERIC SIMON, MFA U.Q.A.M.

LEILA SUJIR, BA Alta.

KELLY THOMPSON, MA A.N.U.

PATRICK TRAER, MFA York (Can.)

Assistant Professors

ERIKA ADAMS, MFA NM (Albuquerque)

JEAN-PIERRE LAROCQUE, MFA Alfred N.Y.

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

Visual Arts Building, Room: VA 250-2

514-848-2424, ext. 4262/4263

Department Objectives

The Department of Studio Arts offers programs that emphasize the importance of practical work with practising artists. Through a series of courses in ceramics, drawing, fibres and material practices, intermedia/cyberarts, painting, photography, print media, and sculpture, students increase their awareness of what constitutes creativity and understanding of the aesthetic and intellectual aspects of art today.

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

81.110.1 STUDIO ART

Program Objective

The Major in Studio Art offers students the freedom for exploration while still developing proficiency within a disciplinary core. The program encourages the cross-referencing of different creative traditions within a solid, historical, theoretical and studio foundation. Its primary objective is to give students the choice to define their own needs in tailoring an individualized program of studies within open parameters. Students are encouraged to choose among a series of studio art electives and progressively establish their concentration or concentrations through required higher-level disciplinary courses. While promoting a respect for disciplines, the program stresses diversity and versatility across studio options.

Students may select their 48 studio art credits required in any media. There is also a similar range from which students can select 12 credits in Art History. Within these specifications, students may fulfill the requirements of the Major in Studio Art either by specializing in a medium or combining studios in a number of them. However, students must complete one studio course at the 300 level (intermediate) and meet the 400 level (advanced) in the same discipline to fulfill their requirements.

Program

60 BFA Major in Studio Art

6 DRAW 200⁶

30 Studio Art electives

12 Chosen from 300⁶- and 400⁶-level courses in a single medium from one of the following disciplines: ARTX; Ceramics; Drawing; Fibres and Material Practices; IMCA; Painting; Print Media; Sculpture.

6 Art History electives

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

Admission to the Major in Studio Art

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Studio Art. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.2 CERAMICS

Program Objective

The Ceramics program offers students a unique opportunity to develop individual studio work in a context that links contemporary art practice to a rich and diverse material history. A vital program within the Studio Arts Department, courses in Ceramics regularly include special collaborative projects, field trips and visiting artists. In addition, the Ceramics program provides students with an important point of departure for investigating diverse subjects ranging from traditional craft practice to new technologies. Well-equipped studios and scheduled labs afford students the means to develop technical skills and to seek information specific to their needs. Course content at all levels of the program includes seminar discussion pertinent to both students' work and to the current practice of ceramics. At an advanced level and in consultation with an advisor, students in Ceramics have the opportunity to pursue independent-study courses.

Program

60 BFA Major in Ceramics

18 CERA 230⁶, 330⁶, 430⁶

6 DRAW 200⁶

6 ARTH 264³, 350³

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

6 Chosen from Ceramics, Fibres and Material Practices, or Sculpture electives

18 Studio Art electives

Admission to the Major in Ceramics

Applicants to Ceramics may apply to enter directly into the Major in Ceramics, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Ceramics. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.3 FIBRES AND MATERIAL PRACTICES

Program Objective

Fibres and Material Practices is a cross-media program of study that explores the relationship of materials to culture. Informed by discourses of post-modernism, feminism, and traditional aesthetics, the Fibres and Material Practices program offers an opportunity for intensive study, both practical and theoretical, of the art, technology, and history of textiles. Such creative and critical investigation, allied with technical proficiency, provides the base students need to develop as emerging artists.

Courses are available at all levels, ranging from introductory classes to independent study for advanced students wishing to focus on a single project. Students concentrating in other areas of Studio Arts are welcome to take most courses offered in the Fibres and Material Practices area.

Program

60 BFA Major in Fibres and Material Practices

12 FBRS 240⁶, 260⁶

6 Chosen from FBRS 341³, 361³, 371³, 372³, 385³, 386³, 395³, or 398³

6 FBRS 480⁶

6 ARTH 266³, 352³

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

24 Studio Art electives

Admission to the Major in Fibres and Material Practices

Applicants to Fibres and Material Practices may apply to enter directly into the Major in Fibres and Material Practices, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Fibres and Material Practices. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.4 INTERMEDIA/CYBERARTS

Program Objective

The Intermedia/Cyberarts program offers a rich curriculum that encourages an intermedia cross-pollination between traditional disciplines and new forms of artistic expression using technology and integrated media practices. Students choose from courses in electronic arts, performance art, and video, focusing on one of these streams or selectively combining areas of study in conjunction with other Studio Arts or Faculty of Fine Arts courses. The program provides a learning environment where students can study different combinations of electronics-robotics-programming, video, performance art, immersive environments, and sound art production.

Program

60 BFA Major in Intermedia/Cyberarts

12 Chosen from IMCA 210³, 220³, 221³, 222³, 230³; SCUL 251³; EAST 298³

12 Chosen from IMCA 310⁶, 320⁶, 330⁶, 398³, 399⁶; EAST 399⁶

6 Chosen from IMCA 410⁶, 420⁶, 421⁶, 430⁶, 498³, 499⁶, 470⁶, 471³, 472³, 480⁶, 481³, 482³

12 Studio Art electives

6 Chosen from Fine Arts electives outside of Studio Art*

9 Chosen from ARTH, ARTT, VDEO 350⁶

3 ARTH 353³

* It is recommended that IMCA students take three credits of CART course offerings in consultation with an advisor.

Admission to the Major in Intermedia/Cyberarts

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Intermedia/Cyberarts. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.5 PAINTING AND DRAWING

Program Objective

The Department of Studio Arts provides an in-depth program in Painting and Drawing, combining theoretical, historical, and practical study at all undergraduate levels. The aim is to provide students with a broad foundation on which they can base their own creative contributions.

Studio courses, seminars, and independent projects on such varied topics as collage, pictorial installation, popular culture, and narration supplement the core courses on painting and drawing. Recognizing the importance of providing basic skills and knowledge, in an atmosphere of freedom, the program is supported by a large number of faculty and guest artists, exposing students to a full range of approaches to drawing and painting.

A graduate program in Painting and Drawing is available for further studies.

Program

60 BFA Major in Painting and Drawing

6 DRAW 200⁶

6 PTNG 200⁶

6 Chosen from a 300-level DRAW

6 Chosen from a 300-level PTNG

6 Chosen from a 400-level DRAW or PTNG

18 Studio Art electives

6 Art History Electives

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

Admission to the Major in Painting and Drawing

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Painting and Drawing. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.6 PHOTOGRAPHY

Program Objective

The Photography program acknowledges photography as a discipline with a distinct artistic and historical identity. It also recognizes that contemporary photographic practice encompasses a rich multiplicity of formal and conceptual approaches.

The course structure of the program and the orientation of its faculty reflect a concern that the students receive a strong historical and theoretical comprehension of the medium. The program stresses the need for students to acquire the concepts and vocabulary necessary for critical discussion of their own photographic work and that of others. Emphasis is placed on the understanding of photography's sociological and artistic ramifications.

Programs

60 BFA Major in Photography

27 PHOT 210⁶, 211³, 300⁶, 311³, 331³, 400⁶

9 Photography electives

6 ARTH 267³, 359³,

6 Chosen from ARTH or ARTT electives

12 Studio Arts electives

30 Minor in Photography

9 PHOT 210⁶, 211³

9 Photography electives

6 Photography or Studio Arts electives

6 ARTH 267³, 359³

Admission to the Major or Minor in Photography

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Photography. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.7 PRINT MEDIA

Program Objective

The Print Media program provides students with a milieu to investigate the meaningful relationships that exist between the technologies of reproduction, individual expression, and contemporary society. Print Media offers multiple venues for student research from intaglio, lithography, and serigraphy to digital and virtual approaches. Experimental, innovative, and critical work is encouraged. Special topics and theory courses provide support for individual aesthetic development and explore the intersections of interdisciplinary practice.

Students in the Print Media program are expected to develop a strong critical understanding of their work and its relationship to contemporary society, as well as develop professional skills and an awareness of the diversity inherent in art practice.

Programs

60 BFA Major in Print Media

36 Credits chosen from Print Media as follows:

6–12 Credits at the 200 level

12–24 Credits at the 300 level

6–18 Credits at the 400 level

6 Studio Art electives

6 Fine Arts electives

6 Art History electives

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

30 Minor in Print Media

18 Credits chosen from Print Media as follows:

3–9 Credits at the 200 level

6–9 Credits at the 300 level

3–9 Credits at the 400 level

6 Studio Art electives

6 Fine Arts electives

Admission to the Major or Minor in Print Media

Applicants to Print Media may apply to enter directly into the Major in Print Media or may enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major or Minor in Print Media. All applicants must submit a *portfolio*, as well as a *letter of intent*, as part of the admission process.

For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

81.110.8 SCULPTURE

Program Objective

The Sculpture program incorporates contemporary genres with divergent approaches to the discipline, ranging from performance to video installation, built environments, and 3D-digital applications, on to convergences of these ideas to the notion of intervention practices. Within the Fine Arts curriculum, these courses offer the opportunity for intensive study in both practical and theoretical contexts encouraging students to explore the relationships between object, material, body, and space. Such creative investigation, allied with technical proficiency, provides the base for students to develop an understanding of a broad range of sculptural issues. Courses are available at all levels, including independent study for advanced students wishing to focus on a single topic or project. To enrich their artistic training, students concentrating in other areas of Fine Arts may also take most courses offered in sculpture.

Program

60 BFA Major in Sculpture

24 SCUL 210⁶, 310⁶, 410⁶, DRAW 200⁶

6 ARTX 480 or 400-level Studio Art elective

18 Studio Art electives

6 Art History electives

6 Chosen from Art History; ARTT; VDEO 350⁶; or other history-based courses chosen from Cinema and Theatre

Admission to the Major in Sculpture

Applicants to Sculpture may apply to enter directly into the Major in Sculpture, or enter the Major in Studio Art with the intention of transferring upon completion of the first year.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to Sculpture. All applicants must submit a *portfolio* of their own work, as well as a *letter of intent*, as part of the admission process. For more information concerning these additional requirements and submission deadline dates, please visit the following website: finearts.concordia.ca/admissions.

COURSES

Art Studio:

ARTX 280 *Integrated Studio in Contemporary Art Practices I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course designed to familiarize students with contemporary art practice and theory in its diverse manifestations. The course questions the boundaries of traditional art disciplines and engages the creative potential of transdisciplinary studio practice with a range of projects that explore, among other things, gesture, mapping, mark-making and time-based image and sound, as well as performative and environmental installation.

NOTE: Students who have received credit for ARTX 250, 260 or 270 may not take this course for credit.

ARTX 380 *Intermediate Integrated Studio in Contemporary Art Practices* (6 credits)

Prerequisite: Any 200-level studio course offered by the Department of Studio Arts. This is an intermediate studio course in which students explore and develop a self-directed body of work. The content and context of the course are diverse and students use a wide range of approaches to and methodologies for contemporary art production. The course provides students with opportunities to examine potential roles for the artist today and is based on professional practices including art research, artist writings and exhibition projects.

ARTX 398 *Special Topics in Contemporary Studio Arts Practice* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course brings together students with a practice based in any of the studio disciplines, and/or who have been following an interdisciplinary practice, allowing discussion and exchange on their work in relation to the aspect of art making that this special topic addresses.

ARTX 399 *Special Topics in Contemporary Studio Arts Practice* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course brings together students with a practice based in any of the studio disciplines, and/or who have been following an interdisciplinary practice, allowing discussion and exchange on their work in relation to the aspect of art making that this special topic addresses.

ARTX 480 *Advanced Integrated Studio in Contemporary Art Practices* (6 credits)

Prerequisite: 300-level studio course previously and enrolment in a program offered by the Department of Studio Arts, or written permission of the Department. This course is structured to support advanced students in the development of a mature and self-directed body of work within a transdisciplinary framework.

ARTX 490 *Independent Study* (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level Studio Arts course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in a specific interdisciplinary project under the supervision of a full-time ARTX faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

ARTX 491 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level Studio Arts course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in a specific interdisciplinary project under the supervision of a full-time ARTX faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

ARTX 492 *Independent Study II* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level Studio Arts course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in a specific interdisciplinary project under the supervision of a full-time ARTX faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

Art Theory:

ARTT 398 *Special Topics in Studio Arts: Ideas and Issues* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This seminar course provides the opportunity for students of various studio practices to discuss changing issues in theory/practice. Visual material, directed readings, exhibition visits, and invited speakers will be determined by the special topic.

ARTT 399 *Special Topics in Studio Arts: Ideas and Issues* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This seminar course provides the opportunity for students of various studio practices to discuss changing issues in theory/practice. Visual material, directed readings, exhibition visits, and invited speakers will be determined by the special topic.

ARTT 470 *Professional Internship* (6 credits)

Prerequisite: 48 credits in degree requirement and written permission of the Department. Students wishing to work in an internship capacity within an artistic/cultural environment may apply for academic credit. The internship is carried out under the joint supervision of a qualified professional (from within or outside the University) and a full-time Studio Arts faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

ARTT 471 *Professional Internship I* (3 credits)

Prerequisite: 48 credits in degree requirement and written permission of the Department. Students wishing to work in an internship capacity within an artistic/cultural environment may apply for academic credit. The internship is carried out under the joint supervision of a qualified professional (from within or outside the University) and a full-time Studio Arts faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

ARTT 472 *Professional Internship II* (3 credits)

Prerequisite: ARTT 471, 48 credits in degree requirement and written permission of the Department. Students wishing to work in an internship capacity within an artistic/cultural environment may apply for academic credit. The internship is carried out under the joint supervision of a qualified professional (from within or outside the University) and a full-time Studio Arts faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

Ceramics:

CERA 230 *Ceramics I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introduction to clay as an art medium employing the various techniques of forming, shaping, and decorating for firing and glazing. *NOTE A/See §200.3*

CERA 330 *Ceramics II* (6 credits)

Prerequisite: CERA 230 or permission of the coordinator. An advanced course in technical and historical research in various ceramic processes with an emphasis on glazes and the use of different clay bodies. *NOTE A/See §200.3*

CERA 398 *Special Topics in Ceramics* (3 credits)

A workshop/seminar, providing an opportunity for the study of specialized aspects of ceramics. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

CERA 399 *Special Topics in Ceramics* (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in ceramics. *NOTE C/See §200.3*

CERA 430 *Ceramics III* (6 credits)

Prerequisite: CERA 330 or permission of the coordinator. The development of a body of personal work and a refinement of specific problems in clay.

CERA 450 *Independent Study* (6 credits)

Prerequisite: 48 credits in the Major in Ceramics; CERA 430 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in ceramics under the supervision of a full-time ceramics faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

CERA 451 *Independent Study I* (3 credits)

Prerequisite: 48 credits in the Major in Ceramics; CERA 430 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in ceramics under the supervision of a full-time ceramics faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

CERA 452 *Independent Study II* (3 credits)

Prerequisite: 48 credits in the Major in Ceramics; CERA 430 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in ceramics under the supervision of a full-time ceramics faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

CERA 499 *Special Topics in Ceramics* (6 credits)

An advanced studio course which provides an opportunity for the study of more specialized aspects of ceramics. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Drawing:**DRAW 200 *Drawing I*** (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An exploration of drawing as a means of expression. Various media are employed to examine and express form, space, figurative, and other graphic images. Drawing from observation, imagination, and memory is included. *NOTE A/See §200.3*

DRAW 300 *Drawing II* (6 credits)

Prerequisite: DRAW 200. A drawing course in which various media and forms of expression are explored at the more advanced level. Lectures and studio periods. *NOTE A/See §200.3*

DRAW 398 *Special Topics in Drawing* (3 credits)

Prerequisite: DRAW 200. A studio course which provides an opportunity for the study of more specialized aspects of drawing. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

DRAW 399 *Special Topics in Drawing* (6 credits)

Prerequisite: DRAW 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of drawing.

DRAW 400 *Drawing III* (6 credits)

Prerequisite: DRAW 300. Continuation of DRAW 300. *NOTE A/See §200.3*

DRAW 420 *Seminar/Workshop in Drawing* (6 credits)

Prerequisite: PTNG 320 or written permission of the Department. An advanced studio in drawing having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in PTNG 320.

NOTE: Students who have received credit for ART 320 may not take this course for credit.

DRAW 450 *Advanced Studio in Drawing* (6 credits)

Prerequisite: DRAW 400. A continuation of DRAW 400.

DRAW 470 *Independent Study* (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level DRAW course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in drawing under the supervision of a full-time drawing faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

DRAW 471 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level DRAW course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in drawing under the supervision of a full-time drawing faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

DRAW 472 Independent Study II (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level DRAW course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in drawing under the supervision of a full-time drawing faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

DRAW 498 Special Topics in Drawing (3 credits)

A course for advanced students which provides an opportunity for the study of more specialized areas in drawing. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

DRAW 499 Special Topics in Drawing (6 credits)

A course for advanced students which provides an opportunity for the study of more specialized areas in drawing. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Fibres and Material Practices:**FBRS 240 Fibre Structures I** (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory course in which students explore the expressive potential of various materials and processes of fibre structures such as loom weaving, feltmaking, basketry, surface applications, and other experimental constructions. *NOTE A/See §200.3*

FBRS 260 Textile Printing and Dyeing I (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory course in which students explore the creative potential of printing, painting, dyeing, resist work, and construction with fabric. *NOTE A/See §200.3*

FBRS 341 Intermediate Fibre Structures (3 credits)

Prerequisite: FBRS 240 or permission of the coordinator. An intermediate-level studio course, which emphasizes the visual and conceptual development in fibre media. Complex woven structures, fibre sculpture, installation practices, and other experimental approaches are explored.

NOTE: Students who have received credit for FBRS 340 may not take this course for credit.

FBRS 361 Intermediate Textile Printing and Dyeing (3 credits)

Prerequisite: FBRS 260 or permission of the coordinator. An intermediate-level studio course in textile printing and dyeing with an emphasis on the development of content. Interdisciplinary approaches such as photo processes and sculptural installation are combined with traditional print and dye techniques.

NOTE: Students who have received credit for FBRS 360 may not take this course for credit.

FBRS 371 Paper: Surface and Object (3 credits)

Prerequisite: 18 credits in Studio Art courses, or permission of the coordinator. This studio course introduces both Western and Eastern (Japanese) methods of processing raw materials to make pulp and form sheets of paper to be used in expressive art forms. Printing, dyeing, cutting, and bookbinding are used in the consideration of paper as surface and medium.

NOTE: Students who have received credit for FBRS 370 may not take this course for credit.

FBRS 372 Paper Works (3 credits)

Prerequisite: 18 credits in Studio Art courses, or permission of the coordinator. This studio course introduces students to making paper as part of an expressive material practice. Sculptural processes such as vacuum relief, casting, and armature building are explored alongside interdisciplinary approaches such as assemblage and the book as object, among others.

NOTE: Students who have received credit for FBRS 370 may not take this course for credit.

FBRS 385 Issues in Material Practices (3 credits)

Prerequisite: FBRS 260 or FBRS 240 or permission of the coordinator. This studio course explores contemporary social, material, and cultural issues addressed through fibre and interdisciplinary studio art practices. Assigned readings inform critiques and discussions. Examples of possible title offerings may include Textiles and Identity; The Sustainable Studio; Textiles Without Borders; Transformative Cloth; and Social and Political Practices in Studio Art, among others.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

FBRS 386 Digital Technologies and Material Practices (3 credits)

Prerequisite: FBRS 240 or FBRS 260 or permission of the coordinator. This studio course combines digital and material approaches within the context of contemporary studio practice. Topics may include software for textile arts, electronic textiles, or other thematic subjects that are combined with electrical and material practices. Other topics may include the use of digital technologies for imaging, pattern development, and textile structures.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

FBRS 395 *Extreme Fibres* (3 credits)

Prerequisite: 18 credits in Studio Art courses, or permission of the coordinator. This studio course tests the boundaries of fibres practices to produce innovative and experimental studio work. Students are encouraged to expand individual interests in challenging ways. Topics may include Textile Arts in Public Spaces; Wildly Interdisciplinary Practices; Fibres and Time-Based Media; Radical Papermaking; and Fibres Off-Site, among others.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

FBRS 396 *Topics in Fibre Surfaces* (3 credits)

Prerequisite: FBRS 260 and 18 credits in Studio Art courses, or permission of the coordinator. A studio course providing an opportunity for specialized study and practice in fibres surfaces, to explore theoretical, critical, and practical issues of interest to the student towards developing their individual aesthetic in contemporary art.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

FBRS 397 *Topics in Fibre Structures* (3 credits)

Prerequisite: FBRS 240 and 18 credits in Studio Art courses, or permission of the coordinator. A studio course providing an opportunity for specialized study and practice in fibres structures, in which to explore contemporary theoretical, critical, and practical issues of interest to the student towards developing a personal aesthetic in art practice.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

FBRS 398 *Special Topics in Fibres and Material Practices* (3 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for study of specialized aspects of fibres. *NOTE C/See §200.3*

FBRS 399 *Special Topics in Fibres and Material Practices* (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in fibres. *NOTE C/See §200.3*

FBRS 450 *Independent Study* (6 credits)

Prerequisite: 48 credits in the Major in Fibres and Material Practices; FBRS 480 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in fibres under the supervision of a full-time fibres faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

FBRS 451 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; FBRS 480 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in fibres under the supervision of a full-time fibres faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

A minimum cumulative GPA of 3.5 is required before requesting permission.

FBRS 452 *Independent Study II* (3 credits)

Prerequisite: 48 credits completed in degree program; FBRS 480 previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in fibres under the supervision of a full-time fibres faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course.

A minimum cumulative GPA of 3.5 is required before requesting permission.

FBRS 480 *Advanced Fibres* (6 credits)

Prerequisite: Six credits in Fibres and Material Practices at the 300 level, or written permission of the Fibres and Material Practices coordinator. An advanced-level course in which students create a personal body of work, refine technical expertise, and develop a visual and critical language related to fibres and textiles. *NOTE C/See §200.3*

FBRS 481 *Professional Internship I* (3 credits)

Prerequisite: 48 credits completed in a Studio Arts program; written permission of the Department. Internships are designed to provide professional experience to students. Students seeking to work in an apprentice capacity with an established artist, or wishing to pursue research in a fibres studio, or research in fibres criticism, museum work, publication, or other related endeavours, may apply for academic credit. The internship is carried out under the joint supervision of a qualified professional (internal or external to the University) and a full-time Fibres and Material Practices faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the Professional Internship is undertaken. Students are required to submit a proposal that clearly defines the learning objectives of the internship and the expected workload (which should equal the hours required for a three-credit course). A Professional Internship request form

must be completed and approved by the faculty supervisor and the Department Chair prior to registration permission. Students will supply a report upon completion of the internship to the faculty supervisor and an evaluation from the external supervisor will inform the final grade submitted by the faculty supervisor.

FBRS 482 *Professional Internship II* (3 credits)

Prerequisite: FBRS 481; 48 credits completed in a Studio Arts program; written permission of the Department. Internships are designed to provide professional experience to students. Students seeking to work in an apprentice capacity with an established artist, or wishing to pursue research in a fibres studio, or research in fibres criticism, museum work, publication, or other related endeavours, may apply for academic credit. The internship is carried out under the joint supervision of a qualified professional (internal or external to the University) and a full-time Fibres and Material Practices faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the Professional Internship is undertaken. Students are required to submit a proposal that clearly defines the learning objectives of the internship and the expected workload (which should equal the hours required for a three-credit course). A Professional Internship request form must be completed and approved by the faculty supervisor and the Department Chair prior to registration permission. Students will supply a report upon completion of the internship to the faculty supervisor and an evaluation from the external supervisor will inform the final grade submitted by the faculty supervisor.

Intermedia/Cyberarts:

IMCA 210 *Introduction to Video Production* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. A studio/seminar course introducing video technology as a tool for aesthetic investigations. Students work individually and collaboratively to develop a proficiency in the medium and evolve their own thematic and formal concerns. The course introduces basic pre-production, production, and post-production skills centred on the use of Mini-DV cameras and desktop technology to present basic concepts of non-linear editing. Issues specific to video are discussed through the analysis and demonstration of video art.

NOTE: Students who have received credit for VDEO 300 may not take this course for credit.

IMCA 220 *Introduction to Digital Media* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course is an introduction to the interface between the real world and the digital computer. Students learn how to get things in and out of the box by acquiring the different digitizing techniques as well as the basic communication protocols, compression formats, and numerous standards for text, sound, video, and digital data. They also learn how to create digital artworks using audiovisuals, scanning, printing, and networking.

IMCA 221 *Programming for Artists* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course is an introduction to basic programming techniques used to create interactive art projects. It is centred on learning the basics of popular object-oriented programming environments such as Max and Jitter, currently used for installation and performance works in interactive music, sound art, interactive video, telematic art, robotics, and more. This course allows students to explore non-screen-based approaches to audiovisual control as well as the more traditional keyboard-and-mouse interface.

IMCA 222 *Electronics for Artists* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course is an introduction to electronics as applied to artistic projects. It focuses on practical applications of basic electronic principles and techniques and the integration of electronic components and circuits in works of art. From basic electricity to motor control, from flashers and beepers to motion detectors, from analog circuits to digital technologies, it allows students to create artworks involving light, sound, movement, sensors, and interactivity.

NOTE: Students who have received credit for EART 300 may not take this course for credit.

IMCA 230 *Performance Art* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course investigates performance art as a form of social and artistic intervention that crosses between the visual and performing arts. Reflecting the long-standing and historical importance of performance practices in the visual arts, students focus on the production of projects that may reflect such issues as real-time, site-specific, interventionist actions, the interrelationship between installations and performances, and the interdisciplinary interface between performance and other practices found in the performing arts. This course also examines video performance and photography as media for generating performative gestures and as documentation tools.

IMCA 310 *Intermediate Video Production* (6 credits)

Prerequisite: IMCA 210 and VDEO 350 previously or concurrently; or written permission of the Department. A studio/seminar course introducing video technology as a tool for aesthetic investigations. Students work individually and collaboratively to develop proficiency in the medium and evolve their own thematic and formal concerns. Non-linear editing systems such as Avid and Final Cut Pro are introduced. Discussions, facilitated by video screenings, workshops, and readings, focus on class projects, student work, and a discussion of related art issues. In addition, this course offers students an opportunity to investigate other cultural practices that inform and interrogate contemporary video art.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for VDEO 300 may not take this course for credit.

IMCA 320 Interactivity Studio in Electronic Arts (6 credits)

Prerequisite: IMCA 221, 222, and enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course focuses on interactive technologies in relation to contemporary art practice including installation, performance, and kinetic sculpture. An interdisciplinary and cybernetic approach to media control and expression (sound, lighting, still images, video), using computers and electronics is emphasized, allowing students to pursue individual or team work. This course is centred on programming environments such as MaxMSP and Jitter and focuses on interactivity through the use of various sensors and interfaces.

NOTE: Students who have received credit for EART 300 may not take this course for credit.

IMCA 330 Intermedia and Performative Practices (6 credits)

Prerequisite: Second-year standing* in the Intermedia/Cyberarts program or written permission of the Department. A studio/seminar class designed as an intermediate-level investigation into an interdisciplinary approach to art practices. The course is structured around students' creation of intermedia art projects with the assistance of the teacher. This development process is further supported by lectures, discussion of assigned readings, guest artists, and the viewing of slides, films, and videos.

NOTE: Students who have received credit for IDYS 200 or 300 may not take this course for credit.

**30 credits completed in degree program.*

IMCA 398 Special Topics in Intermedia/Cyberarts (3 credits)

Prerequisite: Second-year standing* in the Intermedia/Cyberarts program or written permission of the Department. A studio course providing an opportunity for study and practice of specialized aspects of intermedia and cyberarts.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

**30 credits completed in degree program.*

IMCA 399 Special Topics in Intermedia/Cyberarts (6 credits)

Prerequisite: Second-year standing* in the Intermedia/Cyberarts program or written permission of the Department. A studio course providing an opportunity for study and practice of specialized aspects of intermedia and cyberarts.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

**30 credits completed in degree program.*

IMCA 410 Advanced Video Production (6 credits)

Prerequisite: IMCA 310 and enrolment in the Intermedia/Cyberarts program or written permission of the Department. A studio/seminar course that permits students to pursue an advanced investigation of the aesthetic and technical aspects of video art practices through the development of their own body of work.

NOTE: Students are required to bear the cost of materials.

NOTE: Students who have received credit for VDEO 400 may not take this course for credit.

IMCA 420 Robotic Art (6 credits)

Prerequisite: IMCA 320 and enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course is an introduction to robotics as a technology applied to artistic projects and focuses on electronics, mechanics, and programming. From the history of clockwork automata to contemporary self-destructing machine performances, this course covers both theory and practice. Students explore the arts of artificial life and animatronics through electronic circuit design, microcontroller programming, mechanical assembly, motion control, environment sensing, pneumatics, stepper motors and servo systems in order to create robotic art objects, installations, or performances.

IMCA 421 Interactive Screen (6 credits)

Prerequisite: IMCA 320 and enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course focuses on the conception and production of interactive projects for the screen. Students learn how to structure scenarios for interaction and realize them using relevant software. Group discussion and analysis of the works produced familiarize students with the strengths and weaknesses of using different types of conceptual and programming approaches.

IMCA 430 Advanced Intermedia and Performative Practices (6 credits)

Prerequisite: IMCA 330 and enrolment in the Intermedia/Cyberarts program or written permission of the Department. A studio/seminar class designed as an advanced-level investigation into an interdisciplinary approach to art practices. The course is structured around students' creation of intermedia art projects with the assistance of the teacher. This development process is further supported by lectures, discussion of assigned readings, guest artists, and the viewing of slides, films, and videos. This course allows students to work either collaboratively or individually on one or more directed studio projects.

IMCA 470 Independent Study in Intermedia/Cyberarts (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level IMCA course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in intermedia/cyberarts under the supervision of a full-time intermedia/cyberarts faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

IMCA 471 Independent Study in Intermedia/Cyberarts I (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level IMCA course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in intermedia/

cyberarts under the supervision of a full-time intermedia/cyberarts faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

IMCA 472 *Independent Study in Intermedia/Cyberarts II* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level IMCA course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in intermedia/cyberarts under the supervision of a full-time intermedia/cyberarts faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

IMCA 480 *Professional Internship in Intermedia/Cyberarts* (6 credits)

Prerequisite: Third-year standing* and written permission of the Department. Under the joint supervision of a qualified professional and a full-time faculty member, the student is employed within industry or by a professional organization or other relevant institution. A clearly defined agreement between the Department, the student, and the artist/professional or institution involved is established before the internship is undertaken. This agreement should clearly state the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student. **60 credits completed in degree program.*

IMCA 481 *Professional Internship in Intermedia/Cyberarts I* (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. Under the joint supervision of a qualified professional and a full-time faculty member, the student is employed within industry or by a professional organization or other relevant institution. A clearly defined agreement between the Department, the student, and the artist/professional or institution involved is established before the internship is undertaken. This agreement should clearly state the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student. **60 credits completed in degree program.*

IMCA 482 *Professional Internship in Intermedia/Cyberarts II* (3 credits)

Prerequisite: Third-year standing* and written permission of the Department. Under the joint supervision of a qualified professional and a full-time faculty member, the student is employed within industry or by a professional organization or other relevant institution. A clearly defined agreement between the Department, the student, and the artist/professional or institution involved is established before the internship is undertaken. This agreement should clearly state the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student. **60 credits completed in degree program.*

IMCA 498 *Special Topics in Intermedia/Cyberarts* (3 credits)

Prerequisite: Third-year standing* in the Intermedia/Cyberarts program or written permission of the Department. A studio course providing an opportunity for study and practice of specialized aspects of intermedia and cyberarts. **60 credits completed in degree program.*

IMCA 499 *Special Topics in Intermedia/Cyberarts* (6 credits)

Prerequisite: Third-year standing* in the Intermedia/Cyberarts program or written permission of the Department. A studio course providing an opportunity for study and practice of specialized aspects of intermedia and cyberarts. **60 credits completed in degree program.*

Painting:

PTNG 200 *Painting I* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An exploration of painting, colour, style, image, visual skills, and the technology of painting materials. *NOTE A/See §200.3*

PTNG 300 *Painting II* (6 credits)

Prerequisite: PTNG 200. A course in which various media and forms of expression are explored at the more advanced level. *NOTE A/See §200.3*

PTNG 320 *Studio/Seminar in Painting and Drawing* (6 credits)

Prerequisite: DRAW 200; PTNG 200; or written permission of the Department. A combination studio/seminar in which advanced ideas in painting and drawing are addressed. Special topics of approximately one month duration are presented by guest artists from within and outside the Faculty.

PTNG 398 *Special Topics in Painting* (3 credits)

Prerequisite: PTNG 200. A studio course which provides an opportunity for the study of more specialized aspects of painting. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PTNG 399 *Special Topics in Painting* (6 credits)

Prerequisite: PTNG 200; written permission of the Department. A studio course which provides an opportunity for the study of more specialized aspects of painting.

PTNG 400 *Painting III* (6 credits)

Prerequisite: PTNG 300. A continuation of PTNG 300. *NOTE A/See §200.3*

PTNG 420 *Seminar/Workshop in Painting* (6 credits)

Prerequisite: PTNG 320 or written permission of the Department. An advanced studio in painting having its principal emphasis in studio practice, but developing further the theoretical concepts introduced in PTNG 320.

NOTE: Students who have received credit for ART 320 may not take this course for credit.

NOTE A/See §200.3

PTNG 430 *Women and Painting* (6 credits)

Prerequisite: PTNG 200 or written permission of the Department. A studio/seminar course in which students are encouraged to explore their world in painting and consider their practice from the point of view of women's experience, individually and collectively. *NOTE A/See §200.3*

PTNG 440 *Collage* (6 credits)

Prerequisite: Written permission of the Department. An exploration of collage as a means of expression evolving from the historical and artistic traditions of painting and drawing. *NOTE A/See §200.3*

PTNG 450 *Advanced Studio in Painting* (6 credits)

Prerequisite: PTNG 400. A continuation of PTNG 400. *NOTE A/See §200.3*

PTNG 460 *Materials and Methods of the Artist* (6 credits)

Prerequisite: DRAW 300; PTNG 300 or written permission of the Department. Through a series of special projects in drawing and painting, this course familiarizes the student with historical materials and techniques, and with other aspects of the artist's concerns.

NOTE: Students who have received credit for ART 420 may not take this course for credit.

PTNG 470 *Independent Study* (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PTNG course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in painting under the supervision of a full-time painting faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

PTNG 471 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PTNG course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in painting under the supervision of a full-time painting faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

PTNG 472 *Independent Study II* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PTNG course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in painting under the supervision of a full-time painting faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission. *NOTE A/See §200.3*

PTNG 498 *Special Topics in Painting* (3 credits)

A course for advanced students which provides an opportunity for the study of more specialized areas in painting. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

PTNG 499 *Special Topics in Painting* (6 credits)

A course for advanced students which provides an opportunity for the study of more specialized areas in painting. Specific topics for this course, and prerequisites relevant in each case, will be stated in the Undergraduate Class Schedule.

Photography:

PHOT 201 *Introduction to Colour Photography* (3 credits)

An introductory-level course that covers fundamental techniques specific to colour photography including basic camera functions, film exposure, and printing.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials

NOTE: Students in a Major or Minor in the Photography program may not take this course for credit.

PHOT 210 Foundations in Photographic Vision Theory and Practice I (6 credits)

Prerequisite: Enrolment in the Major or Minor in Photography, or 24 credits in a specialization/major in the Faculty of Fine Arts. In this course, students investigate and examine the numerous aspects of photography's complex history, aesthetics, and processes, as well as different camera and darkroom techniques specific to colour photography. Students learn how to control the camera, expose film properly (transparency and negative), develop good printing skills in colour, and produce a coherent body of work. They should become aware of how colour contributes to the structure and meaning of photographs. Other topics include the history of colour photography and aesthetic and conceptual issues in the work of contemporary photographers. Students are expected to work on technical exercises and produce a final portfolio which is content-driven, demonstrates technical proficiency, and expresses the individual's artistic interest and vision.

NOTE: Students who have received credit for PHOT 200, 221, or 322 may not take this course for credit.

NOTE: Each student's work is evaluated by a jury of Photography faculty at the end of each term.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 211 Black-and-White Photography I (3 credits)

Prerequisite: PHOT 210 and ARTH 267 previously or concurrently; enrolment in the Major or Minor in Photography; or written permission of the program director. A studio course introducing the use of black and white as photographic process, parallel to colour production and practice taught in PHOT 210. Students are taught basic technical skills, film processing, darkroom techniques and printing. Students are also introduced to black-and-white photographic tradition and aesthetics. Students must produce a final portfolio that is content-driven, demonstrates technical proficiency, and expresses personal artistic interests and vision.

NOTE: Students who have received credit for PHOT 200 may not take this course for credit.

NOTE: Each student's work is evaluated by a jury of Photography faculty at the end of the term.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 221 Colour Photography I (3 credits)

Prerequisite: PHOT 200 and ARTH 267 previously or concurrently; enrolment in the Major or Minor in Photography; or written permission of the program director. In this course, students become aware of how colour contributes to the structure and meaning of photographs. Topics include the history of colour and aesthetic and conceptual issues in the work of contemporary photographers. Students are expected to achieve a basic level of expertise with the techniques of colour and to make high-quality prints. The goal in this course is for each student to produce a final portfolio which demonstrates technical proficiency, is content-driven, and expresses the individual's personal artistic interests and vision.

NOTE: Students who have received credit for PHOT 210 may not take this course for credit.

NOTE: Each student's work is evaluated by a jury of Photography faculty at the end of the term.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 300 Photographic Vision: Theory and Practice II (6 credits)

Prerequisite: PHOT 210 and ARTH 267 and enrolment in the Major or Minor in Photography; or written permission of the program director. The purpose of this studio course is to provide a framework within which students pursue their photographic practice at an intermediate level. Students are encouraged to explore concepts and technical components in a long-term project. They develop a photographic language which is specific to their own practice and learn from the work of other contemporary artists. The final portfolio is content-driven and expresses personal artistic vision.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

NOTE: Each student's work is evaluated by a jury of Photography faculty at the end of each term.

PHOT 301 Black-and-White II Fine Art Printing (3 credits)

Prerequisite: PHOT 210, 211, 331; enrolment in the Major or Minor in Photography; or written permission of the program director. A continuation of PHOT 211, this studio course explores further techniques in fine art black-and-white printing. Students are introduced to advanced darkroom processes, mural printing, and quad tone digital printing. Students must produce a final portfolio that is content-driven, demonstrates technical proficiency, and expresses personal artistic interests and vision.

NOTE: Students who have received credit for PHOT 200 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 311 Large Format Photography I (3 credits)

Prerequisite: PHOT 210, 211; ARTH 267; enrolment in the Major or Minor in Photography; or written permission of the program director. A studio course introducing large format photography, its techniques and application. Demonstrations cover the basics of view camera operation, light metering, sheet film exposure, development, and advanced printing. Assignments based on traditional genres encourage ease with all aspects of large format use and their personal applications.

NOTE: Each student's work is evaluated by a jury of Photography faculty at the end of the term.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 312 Large Format Photography II (3 credits)

Prerequisite: PHOT 210, 211, 311; ARTH 267; enrolment in the Major or Minor in Photography; or written permission of the Department. A studio course directed towards the development of an individual approach to view camera photography. Various uses of advanced techniques are also discussed. Emphasis is put on the development of a coherent portfolio of prints expressing personal concerns.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 322 *Colour Photography II* (3 credits)

Prerequisite: PHOT 210; PHOT 221 or 321; ARTH 267; and enrolment in the Major or Minor in Photography, or written permission of the program director. A continuation of PHOT 221, this course explores further techniques in colour photography and advanced colour printing. Aesthetic issues such as changing attitudes towards the colour medium and its role in documentary work are discussed. A final portfolio reflects the students' personal approach to colour photography.

NOTE: Students who have received credit for PHOT 210 may not take this course for credit.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 331 *Digital Photography I* (3 credits)

Prerequisite: PHOT 210; PHOT 221 previously or concurrently; and enrolment in the Major in Photography, or written permission of the program director. An introductory studio course investigating the technical and creative aspects of digital photography. This course provides students with an understanding of the digital image and a practical application of the tools within their personal approach to photography. Students explore the production of digital photographs, emphasizing the manipulation of images with software and the preparation for different formats. Issues related to the use of digital imagery within the larger context of photography are explored.

NOTE: Students who have received credit for this topic under a PHOT 498 number may not take this course for credit.

NOTE: Students are required to bear the cost of removable storage devices, printing, and other materials.

PHOT 332 *Digital Photography II* (3 credits)

Prerequisite: PHOT 331 and enrolment in the Major or Minor in Photography, or written permission of the Department. This advanced course expands on the basic control skills and creative aspects of digital technology by implementing personal approaches to the use of technology. Emphasis is on the creative development and advanced use of technology for the production of a portfolio.

NOTE: Students who have received credit for this topic under a PHOT 498 number may not take this course for credit.

NOTE: Students are required to bear the cost of removable storage devices, printing, and other materials.

PHOT 398 *Special Topics in Photography* (3 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography. *NOTE C/See §200.3*

PHOT 399 *Special Topics in Photography* (6 credits)

Prerequisite: Written permission of the Department. An opportunity for the study of limited and more specialized aspects of photography. *NOTE C/See §200.3*

PHOT 400 *Advanced Workshop in Photography* (6 credits)

Prerequisite: 48 credits in the Major in Photography including PHOT 300, ARTH 359, or written permission of the program director. A studio course in which students pursue one or more extended photographic projects in black and white and/or digital. Topics related to contemporary photography are presented in a seminar fashion.

NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT 470 *Professional Internship* (6 credits)

Prerequisite: 48 credits in the Major in Photography and written permission of the Department. A student wishing to work in an apprentice capacity with an established photographic artist, or wishing to pursue research in photographic criticism, museum work, publication, or other related endeavours may apply for academic credit. The internship will be carried out under the joint supervision of a qualified professional (from within or without the University) and a full-time Photography faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

PHOT 471 *Professional Internship I* (3 credits)

Prerequisite: 48 credits in the Major in Photography and written permission of the Department. A student wishing to work in an apprentice capacity with an established photographic artist, or wishing to pursue research in photographic criticism, museum work, publication, or other related endeavours may apply for academic credit. The internship will be carried out under the joint supervision of a qualified professional (from within or without the University) and a full-time Photography faculty member. A clearly defined agreement between the Department, the student, and the artist or institution involved will be arrived at before the internship is undertaken. This agreement should state clearly the nature of the student's participation and the hours of work expected. Projects receiving approval for the internship credits must demonstrate appreciable learning potential for the student.

PHOT 472 *Professional Internship II* (3 credits)

Prerequisite: 48 credits in the Major in Photography and written permission of the Department. Students who wish additional internships in a professional milieu may take this course.

PHOT 480 *Independent Study* (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PHOT course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in photography under the supervision of a full-time photography faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PHOT 481 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PHOT course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in photography under the supervision of a full-time photography faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PHOT 482 *Independent Study II* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PHOT course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in photography under the supervision of a full-time photography faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PHOT 498 *Special Topics in Photography* (3 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

PHOT 499 *Special Topics in Photography* (6 credits)

Prerequisite: Written permission of the Department. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

Print Media:**PRIN 211 *Intaglio I* (3 credits)**

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in intaglio techniques with an emphasis on creative imagery. This course covers traditional acid and non-acid techniques including drypoint, power engraving tools, aquatint, digital imaging, light-sensitive plates and methods of printing. Lectures and critiques focus on theoretical, historical, and aesthetic issues in contemporary print media.

NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 221 *Lithography I* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in the basic principles of hand-printed stone and photo-digital plate lithography with an emphasis on image development. Drawing and processing images on stone, creating digital files, hand-drawn and digitally generated transparencies, registration, edition printing, and an introduction to colour are covered. Through assignments, group critiques, and individual discussions with the instructor, students investigate print media in the context of contemporary culture and explore the theoretical and aesthetic issues in the creation of printed artworks.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 231 *Screenprinting I* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. An introductory studio course in the basic techniques of screenprinting with an emphasis on creative imagery. This course covers stencil techniques including computer imaging, digital and hand-drawn transparencies, light-sensitive emulsion, registration and colour printing. Students explore the theoretical and conceptual issues of printed artwork in studio practice.

NOTE: Students who have received credit for PRIN 230 may not take this course for credit.

PRIN 311 *Intaglio II* (3 credits)

Prerequisite: PRIN 211 or written permission of the Department. An intermediate-level studio course in intaglio with an emphasis on multi-plate imagery, including digital applications in print, colour separations, registration, colour proofing and printing. Students are expected to develop individual projects that explore theoretical issues in contemporary print practice.

NOTE: Students who have received credit for PRIN 210 may not take this course for credit.

PRIN 321 *Lithography II* (3 credits)

Prerequisite: PRIN 221 or written permission of the Department. An intermediate studio course in lithography where students explore diverse conceptual and technical approaches to creating printed colour images. Drawing, digital imaging, photo-transfer methods, photo-plate processes, colour separation, inks, registration and colour printing are covered. Emphasis through class discussions, slide lectures, visiting artists and critiques is placed on the development of individual studio art practice.

NOTE: Students who have received credit for PRIN 220 may not take this course for credit.

PRIN 331 *Screenprinting II* (3 credits)

Prerequisite: PRIN 231 or written permission of the Department. A studio course in the techniques of screenprinting at the intermediate level. This course provides the opportunity for continued research in digital imaging and computer print applications, colour printing, alternative printing surfaces and the combination of print processes. Students are required to create a body of artwork that demonstrates their theoretical and conceptual knowledge of contemporary print media.

NOTE: Students who have received credit for PRIN 230 may not take this course for credit.

PRIN 341 *Digital Print Media I* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course with an emphasis on exploring the interdisciplinary, multimedia, and theoretical aspects of digital prints. The focus is on analog/digital models, strategies for cultural sampling from the numeric matrix, and the convergence of print with new forms of mass communication such as the Internet.

PRIN 351 *Digital Print Processes* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course in the basic concepts of digital imaging and print applications. This course covers file creation, layers and channels for multi-plate hand-printing, resolution, registration, and file export to various digital print formats. Lectures and critiques focus on theoretical, critical, and aesthetic issues in contemporary digital print media.

PRIN 371 *Contemporary Print Processes* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. This studio course addresses specific topics in print processes and new technologies. Students create a portfolio of artwork that demonstrates their research.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 381 *Aspects of Print Media* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course that explores specific problems in the discourse of print media. Students create a body of artwork that demonstrates critical thinking and research on the featured topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 398 *Special Topics in Print Media* (3 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course that examines ideas and practices in contemporary print media. Students produce printed images that reflect their research and critical thinking on the specific topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 399 *Special Topics in Print Media* (6 credits)

Prerequisite: Enrolment in a BFA program or written permission of the Department. A studio course that examines ideas and practices in contemporary print media. Students produce printed images that reflect their research and critical thinking on the specific topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 411 *Intaglio III* (3 credits)

Prerequisite: PRIN 311 or written permission of the Department. An advanced studio course for students who want to refine their expertise in intaglio techniques through experimentation and innovation. This course provides the opportunity for further exploration in digital imaging, photo-generated imagery, multiple-plate colour imagery, alternative print surfaces, combined print processes and new technologies. Students will be required to develop a coherent portfolio that demonstrates their involvement in contemporary print media.

PRIN 421 *Lithography III* (3 credits)

Prerequisite: PRIN 321 or written permission of the Department. An advanced studio course that offers students the opportunity to refine their expertise in the creation of hand-drawn and digitally generated images in lithography while exploring experimental and innovative artwork. Emphasis is on individual creative development. Students may choose to explore unique prints, combine print processes, create sequential imagery, three-dimensional and installation projects, and cross-disciplinary work as alternative formats for the lithographic print. Demonstrations, slide and artists' presentations, lectures and critiques focus on advanced lithographic print approaches and individual interpretation in the creation of artwork.

PRIN 431 *Screenprinting III* (3 credits)

Prerequisite: PRIN 331 or written permission of the Department. An advanced studio course where students investigate digital print applications, experimental imagery, combined techniques and diverse forms of printing. Group critiques and lectures emphasize problem solving and critical analysis in the creation of personal imagery.

PRIN 441 *Digital Print Media II* (3 credits)

Prerequisite: PRIN 341 or written permission of the Department. An advanced studio course emphasizing innovative and critical approaches to the digital print. Students develop an independent research project and produce interdisciplinary work that investigates digital reproduction technologies.

PRIN 451 *Projects in Print Media I* (3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course where students propose and complete print projects in consultation with the instructor. This course is an opportunity for students to continue their aesthetic research with in-depth and focused print projects. Students design projects according to their interests and established technical proficiency. The course emphasizes individual practice within the context of informed discussion, group and individual critiques, gallery and museum visits, and may include an exhibition.

NOTE: Students who want advanced technical information in a particular process should enrol in 300- or 400-level courses of intaglio, screenprinting or lithography.

PRIN 452 *Projects in Print Media II* (3 credits)

Prerequisite: PRIN 451 or written permission of the Department. A studio course that provides the opportunity for advanced research into personal imagery and a commitment to print processes. This course is a continuation PRIN 451.

PRIN 470 *Independent Study in Print Media* (6 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PRIN course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in print media under the supervision of a full-time print faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PRIN 471 *Independent Study in Print Media I* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PRIN course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in print media under the supervision of a full-time print faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PRIN 472 *Independent Study in Print Media II* (3 credits)

Prerequisite: 48 credits completed in degree program; a 400-level PRIN course previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in print media under the supervision of a full-time print faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

PRIN 481 *Professional Internship* (3 credits)

Prerequisite: Written permission of the Department. Internships are for students who wish to obtain practical experience by working as an apprentice in a professional environment, or who would like to pursue research in the curating of prints, print criticism, or other related experience in print media, and receive academic credit for the activity. Approval of the project will be based on the demonstrable learning potential of the activity. Students are required to submit an internship proposal that clearly defines the objective of the activity, appropriate workload (equivalent to the hours required for a three-credit course), nature of participation, and supervisory schedules. The internship will be jointly supervised by a faculty member and a qualified professional. It is the student's responsibility to obtain approval for the proposal from a program advisor, including any required contractual agreements, before the start of the internship.

PRIN 498 *Special Topics in Print Media* (3 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students produce printed images that reflect their research and critical thinking on the specific topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PRIN 499 *Special Topics in Print Media* (6 credits)

Prerequisite: Six credits in Print Media or written permission of the Department. A studio course for advanced students that examines ideas and practices in contemporary print media. Students produce printed images that reflect their research and critical thinking on the specific topic.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Sculpture:**SCUL 210 *Sculpture and Material Practices* (6 credits)**

Prerequisite: Enrolment in a BFA program or written permission of the Department. This is a studio course in which students explore creative research to facilitate their development as artists in the encompassing discipline of sculpture. Modes of expression in sculpture are investigated through a variety of contemporary and traditional materials.

NOTE: Students who have received credit for SCUL 200 may not take this course for credit.

SCUL 251 *Sculpture/Mechanics* (3 credits)

Prerequisite: Enrolment in the Intermedia/Cyberarts program or written permission of the Department. This studio course introduces students to animating sculpture through a variety of techniques such as moving joints, gear, chain, and pulley systems, and motion converters, leading to more complex assemblies in animating static form. Students develop basic skills in reading and drawing blueprints, as well as in measuring and marking techniques for application in metal, wood, mould-making, and other applicable materials.

SCUL 310 *Sculpture and Spatial Practices* (6 credits)

Prerequisite: SCUL 210 (200) or permission of the Department. This course builds and expands on the potential for expression inherent in contemporary sculpture. Students are encouraged to develop an individual form of study through the various spatial

considerations of sculptural intervention, installation, action, and object. Participants build on their awareness of contemporary issues and hone their identities as artists.

NOTE: Students who have received credit for SCUL 300 may not take this course for credit.

SCUL 396 *Digital Sculpture* (3 credits)

Prerequisite: Permission of the Department. This studio course introduces 3D software for sculptors, covering modelling, drafting, and rendering for both real and virtual output, using advanced manual and automated processes.

SCUL 398 *Special Topics in Sculpture* (3 credits)

Prerequisite: Third-year standing*; written permission of the Department. A workshop/ seminar course providing an opportunity for the study of specialized aspects of sculpture. *NOTE C/See §200.3*

**Fewer than 33 credits remaining in the degree program.*

SCUL 399 *Special Topics in Sculpture* (6 credits)

Prerequisite: Written permission of the Department. A workshop/seminar course providing an opportunity for the study of specialized aspects in sculpture. *NOTE C/See §200.3*

SCUL 410 *Sculpture and Interventionist Practices* (6 credits)

Prerequisite: SCUL 310 (300) or permission of the Department. This is an advanced investigation of concepts through research in sculpture oriented to the development of a personal body of work. Installation, intervention, and public space form the background for presenting sculptural ideas. Diversity of contemporary sculptural practice and critical discourse is encouraged to promote professional autonomy in students' studio work and ideas.

NOTE: Students who have received credit for SCUL 400 may not take this course for credit.

SCUL 450 *Independent Study* (6 credits)

Prerequisite: 48 credits completed in degree program; SCUL 410 (400) previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in sculpture under the supervision of a full-time sculpture faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a six-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

SCUL 451 *Independent Study I* (3 credits)

Prerequisite: 48 credits completed in degree program; SCUL 410 (400) previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in sculpture under the supervision of a full-time sculpture faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

SCUL 452 *Independent Study II* (3 credits)

Prerequisite: 48 credits completed in degree program; SCUL 410 (400) previously or concurrently; and written permission of the Department. This course provides a limited number of students the opportunity to pursue advanced studies in sculpture under the supervision of a full-time sculpture faculty member. A clearly defined written agreement between the student and the instructor involved is required before the independent study is undertaken. This agreement should clearly state the nature of the student's research, and the scope of the project and schedule of work should be equivalent to the workload of a three-credit course. A minimum cumulative GPA of 3.5 is required before requesting permission.

SCUL 490 *Advanced Studio Practice* (6 credits)

Prerequisite: Enrolment in the Major in Sculpture, in Ceramics, or in Fibres and Material Practices; or written permission of the Department. A studio course providing an opportunity for the advanced student to work in an intimate context within a studio setting, structured around current topics of theoretical and practical importance.

Video:

VDEO 350 *Video History and Theory* (6 credits)

A survey lecture course introducing the history and theory of art video practice since its inception in the 1960s. The course locates the roots of this art form in such divergent impulses as conceptualism, community activism, technological experimentation, and broadcast television, as well as in narrative and documentary traditions. In addition, regional Canadian video artists and co-operatives are situated within international historical trends and the development of post-modern and other theoretical perspectives. Weekly screenings.

81.120 THEATRE

Faculty

Chair

ROBERT REID, MFA U.Q.A.M., Assistant Professor

Canada Research Chair

SANDEEP BHAGWATI, Kuenstlerische Reifeprüfung Musikhochschule Munich, CURSUS Ircam (Paris)

Professors

ANA CAPPELLUTO, MEd McG.

EDWARD LITTLE, PhD Tor.

ERIC MONGERSON, MFA Humboldt State

Associate Professors

KIT BRENNAN, MFA Alta.

GENE GIBBONS, MA W. Virginia, MFA Purdue

MARK SUSSMAN, PhD N.Y.

Assistant Professors

RAYMOND MARIUS BOUCHER, BFA C'dia.

NOAH DREW, MFA Temple

URSULA NEUERBURG-DENZER, PhD Freie U., Berlin

For the complete list of faculty members, please consult the Department website.

Location

Sir George Williams Campus

GM Building, Room: 500-01

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Email: theatre@alcor.concordia.ca

Website: theatre.concordia.ca

Department Objectives

The Theatre Department offers students an opportunity to explore theatre as an art form and instrument for social and personal change.

The Theatre programs provide students with a basic grounding in design, theatre and development, production, performance, and playwriting, and serve as preparation for advanced studies.

The Department welcomes autonomy and personal creativity in its students while encouraging initiative and collaboration.

Reflecting the realities of modern theatre, it also prepares students for self-employment and entrepreneurial roles within national and international milieux.

Programs

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

48 BFA Major in Theatre

24 TDEV 209³; DFTT 209³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³

6 Chosen from DFTT 210³; TPER 210³; TDEV 210³

18 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

60 BFA Specialization in Design for the Theatre

27 TDEV 209³; DFTT 209³; 210³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³

3 Chosen from TPER 210³; TDEV 210³

- 9 Chosen from DFTT 311³, 321³, 331³, 498³
- 9 Chosen from DFTT 315³, 325³, 326³, 335³, 336³, 337³, 398³, 401³, 402³
- 3 THEA 411³
- 9 Elective credits from the Faculty of Fine Arts*

*Students are advised to select six credits from Studio Art electives.

60 BFA Specialization in Theatre and Development

- 27 TDEV 209³, 210³; DFTT 209³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³
- 3 Chosen from DFTT 210³; TPER 210³
- 15 Chosen from TDEV 302³, 303³, 311³, 312³, 431³, 432³, 498³; DTHY 301³
- 15 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

60 BFA Specialization in Theatre Performance

- 27 TDEV 209³; DFTT 209³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³, 210³
- 3 Chosen from TDEV 210³; DFTT 210³
- 18 Chosen from TPER 231³, 311³, 312³, 325³, 331³, 333³, 345³, 355³, 398³, 431³, 498³
- 12 Elective credits from the Department of Theatre (including a minimum of three credits at the 400 level)

48 BFA Major in Playwriting

- 24 TDEV 209³; DFTT 209³; THEA 211³, 303³, 312³, 404³; PROD 211³; TPER 209³
- 6 Chosen from DFTT 210³; TPER 210³; TDEV 210³
- 15 THEA 241³, 341³, 342³, 420⁶
- 3 THEA 411³

24 Minor in Theatre

- 6 Chosen from THEA 303³, 312³, 404³
- 6 Chosen from PROD 211³; THEA 211³; TPER 201³
- 12 Elective credits from the Department of Theatre

81.120.1 Admission to Programs in Theatre

The Department of Theatre has distinct admissions procedures in addition to the normal admission process of Concordia University. All applicants (except those applying to the Minor in Theatre) are required to submit a letter of intent (approximately 500 words) in which they name specifically to which program they wish to apply: the Major in Theatre, the Specialization in Theatre and Development, the Specialization in Design for the Theatre, the Major in Playwriting or the Specialization in Theatre Performance.

Applicants must arrange their appointments and obtain detailed information regarding interviews, auditions, portfolios, and letters of intent on the Department's website at: theatre.concordia.ca.

In addition to the interview and letter of intent:

1. Applicants applying to the Specialization in Design for the Theatre must bring to the interview a portfolio including visual material demonstrating their creative abilities and interests.
2. Applicants applying to the Specialization in Theatre and Development are required to audition.
3. Applicants applying to the Specialization in Theatre Performance are required to audition.
4. Applicants applying to the Major in Playwriting must send in a portfolio of writing for the stage before their scheduled interview.
5. Applicants applying to the Major in Theatre may choose to audition or to submit a portfolio of materials demonstrating their creative abilities and interests.

Courses

Theatre:

THEA 211 Script Analysis (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. A study of systematic approaches commonly used for the analysis of dramatic scripts. Students practise analytical skills on a representative selection of plays, including, when appropriate, those slated for production by the Department.

NOTE: Students who have received credit for THEA 240 may not take this course for credit.

THEA 241 Elements of Playwriting (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department. Study of and practice in creating the elements of a play. Students explore different aspects of the writing process, and are expected to submit work of their own on a regular basis for discussion and workshoping within the group.

THEA 298 Special Topics in Theatre Studies (3 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

THEA 299 *Special Topics in Theatre Studies* (6 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

THEA 303 *Theatre History I* (3 credits)

A study of the development of the physical stage and representative theoretical and dramatic works within their social context from pre-history to the 18th century in Europe. Where appropriate, screenings of plays representing the periods under study are shown.

NOTE A/See §200.3

THEA 312 *Current Canadian Theatre* (3 credits)

A survey of Canadian theatre in the present day, incorporating a study of notable works, outstanding artists and other figures in the arts world and arts organizations. The course includes an analysis of conditions prevailing on the theatre in various regions of the country and invites students to take stock of their own future in the theatre or elsewhere.

NOTE: Students who have received credit for THEA 403 may not take this course for credit.

THEA 316 *Puppetry and Performing Object Workshop* (3 credits)

Prerequisite: 15 credits in Theatre, or written permission of the Department of Theatre. This course introduces students to basic theories, practices, and history of performance with puppets and performing objects. It combines building, basic manipulation, and show-making techniques. Students work on short scenes for performance.

THEA 317 *Stage Management* (3 credits)

Prerequisite: 12 credits in Theatre, or equivalent experience; or written permission of the Department of Theatre. The key role of a stage manager in theatrical production from audition through closing. Topics for consideration include organizational techniques, prompt-book construction and use, scheduling, personnel supervision, and the "running" of a show.

THEA 321 *Theatre Administration I* (3 credits)

An introduction to theatre administration including theatre organization and management, budgeting, box office operation, publicity, and public relations. *NOTE A/See §200.3*

THEA 341 *Playwriting I* (3 credits)

Prerequisite: THEA 241, or enrolment in a program of the Department of Theatre, or written permission of the Department. A seminar in the writing of plays. Students concentrate upon a particular genre, length of play, or other pre-arranged topic, and submit original scripts for discussion, workshopping, and possible presentation.

THEA 342 *Playwriting II* (3 credits)

Prerequisite: THEA 241, or enrolment in a program of the Department of Theatre, or written permission of the Department. A seminar in the writing of plays. Students concentrate upon a particular genre, length of play, or other prearranged topic, and submit original scripts for discussion, workshopping, and possible presentation. The prearranged topic or genre will be different from that offered in Playwriting I in any one year.

THEA 398 *Special Topics in Theatre Studies* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

THEA 399 *Special Topics in Theatre Studies* (6 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

THEA 404 *Theatre History II* (3 credits)

Prerequisite: THEA 303 or written permission of the Department of Theatre. A study of the development of the physical stage and representative theoretical and dramatic works within their social context in Europe, the United States, and Canada from the 19th century to recent years. Where appropriate, screenings of plays representing the periods and types of works under study are shown.

NOTE: Students who have received credit for THEA 304 may not take this course for credit.

THEA 405 *Independent Study I* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects supervised by a faculty member. Students are required to submit a paper based on their investigation. *NOTE C/See §200.3*

THEA 411 *Directing* (3 credits)

Prerequisite: Completion of 24 credits of the Core, including DFTT 210 and TPER 210 or written permission of the Department of Theatre. Examination of and experimentation in staging and production organization. Exercises in visual, structural, and conceptual analysis. *NOTE A/See §200.3*

THEA 415 *Independent Study II* (3 credits)

Prerequisite: THEA 405 and written permission of the Department of Theatre. A continuation of THEA 405. Students who have taken THEA 405 register for THEA 415 for additional credits.

THEA 420 *Playwriting Workshop* (6 credits)

Prerequisite: THEA 341, 342, and written permission of the Department of Theatre; or enrolment in the Major in Playwriting. A workshop for playwrights, actors, directors, and scenographers in which original scripts are written and workshopped for possible future production. An outcome of an appropriate dimension is a feature of this course.

THEA 422 *Theatre Administration II* (3 credits)

Prerequisite: THEA 321 or written permission of the Department of Theatre. A continuation of THEA 321 with additional topics introduced such as financing, contracting, taxation, and touring. *NOTE A/See \$200.3*

NOTE: Students who have received credit for THEA 322 may not take this course for credit.

THEA 498 *Special Topics in Theatre Studies* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

THEA 499 *Special Topics in Theatre Studies* (6 credits)

Prerequisite: Written permission of the Department of Theatre. Topics in theatre which may include genres, periods, individual playwrights, and national theatres.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Design for the Theatre:

DFTT 209 *Introduction to Design for the Theatre I* (3 credits)

Prerequisite: Permission of the Department of Theatre. An examination of the theatrical design process, including the role of designers in the theatre. Students study and practise the conception, communication, and realization of design ideas in lectures and lab.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 210 *Introduction to Design for the Theatre II* (3 credits)

Prerequisite: DFTT 209. A continuation of DFTT 209.

NOTE: Students who have received credit for DFTT 250 may not take this course for credit.

DFTT 298 *Special Topics in Design for the Theatre* (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

DFTT 299 *Special Topics in Design for the Theatre* (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

DFTT 305 *Independent Study* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects in Design for the Theatre supervised by a faculty member.

DFTT 311 *Lighting Design* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting design for the theatre with emphasis on conception, development, and communication of lighting design ideas. Students participating in lectures and studios examine theories, aesthetics, and conventions of stage lighting design. They also carry out projects in lighting design conception.

DFTT 315 *Lighting Design Realization* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Lighting for the stage with emphasis on analysis, development, and execution of lighting design ideas. Students participating in lectures and studios examine lighting as a practical expressive and interpretative media. They carry out projects using stage lighting equipment in an actual theatre space.

NOTE A/See \$200.3

DFTT 321 *Costume Design* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costume design for the theatre with emphasis on imaginative and analytical processes of developing and communicating costuming design ideas. Students, participating in lectures, studios and projects, examine theories, aesthetics, and conventions of stage costume design.

DFTT 325 *Costume Design Realization* (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Materials, equipment, techniques, and procedures utilized in the construction of theatre costumes. Emphasis is on patterning, draping, and basic construction methods.

DFTT 326 Costume Accessories Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Costuming for the stage with emphasis on analysis, development, and execution of costume design ideas. Students, participating in lectures and studios, examine materials, equipment, and procedures utilized in the realization of costume accessories. They carry out projects in buckram and frame construction for hats, mask-making, and accessory construction. *NOTE A/See §200.3*

DFTT 331 Set Design (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Set design for the theatre with emphasis on conception, development, and communication of scenic design ideas. Students, participating in lectures and studios, examine theories, aesthetics, and conventions of set design. They also carry out projects in set conception.

DFTT 335 Set Design Realization (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Stage scenery with emphasis on analysis, development, and execution of scenic design ideas. Students, participating in lectures and studios, examine the process of translating scenic designs into actual stage systems. They carry out projects using the equipment and material commonly used in set construction.

DFTT 336 Stage Properties (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the design and construction of properties and accessories for theatre production.

DFTT 337 Scene Painting (3 credits)

Prerequisite: DFTT 209 and 210 or written permission of the Department of Theatre. Studio work in the materials and technology of painting for the theatre. *NOTE A/See §200.3*

DFTT 398 Special Topics in Design for the Theatre (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

DFTT 399 Special Topics in Design for the Theatre (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

DFTT 401 Designer's Studio I (3 credits)

Prerequisite: DFTT 209, 210; written permission of the Department of Theatre. Students apply their design knowledge to special projects, which may include portfolio development or the design of Theatre Department productions.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for this topic under a DFTT 498 number may not take this course for credit.

DFTT 402 Designer's Studio II (3 credits)

Prerequisite: DFTT 401; written permission of the Department of Theatre. A continuation of DFTT 401.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

NOTE: Students who have received credit for this topic under a DFTT 498 number may not take this course for credit.

DFTT 498 Special Topics in Design for the Theatre (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

DFTT 499 Special Topics in Design for the Theatre (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre design.
NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Production:

NOTE: Conditions of access to courses and scheduling:

1. All assignments or roles are given after interview or audition.
2. Before registering for Production courses, students must make sure they are free to attend all rehearsals or crew calls according to the schedules published each session by the Department of Theatre.
3. Students may not register for more than one course in Production during the same term.

PROD 202 Behind the Scenes (3 credits)

Students explore the processes of getting a play "on the boards." They trace the production process from the playwright's creation of a script, through directorial and design conception and the actor's work in rehearsal and performance, to the critic's and the audience's response. Students attend live theatre performances, meet with playwrights, actors, directors, and designers, and examine issues affecting the theatre's role, its operation, and its survival in Montreal and in society today.

NOTE: This course may not be credited towards the requirements for a BFA Specialization or Major in Theatre.

NOTE: Students who have received credit for PROD 211 or for this topic under a THEA 498 number may not take this course for credit.

PROD 211 Introduction to Theatre Production (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or permission of the Department. A survey of selected operations central to production in the professional theatre.

NOTE: Students who have received credit for THEA 240 may not take this course for credit.

PROD 298 Special Topics in Theatre Production (3 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PROD 299 Special Topics in Theatre Production (6 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PROD 311 Theatre Production I (3 credits)

Prerequisite: TDEV 209; DFTT 209; FFAR 250; THEA 211; TPER 209; PROD 211; two of TPER 210, TDEV 210, or DFTT 210; and written permission of the Department of Theatre. Participation in a theatre production prepared under the auspices of the Department of Theatre and presented to an audience. The systematic preparation for the presentation of the work requires the integration of scholarly, imaginative and organizational activities under the supervision of instructors and staff acting either as part of the creative team or as guides and members of an adjudicating panel.

PROD 312 Theatre Production II (3 credits)

Prerequisite: PROD 311 and written permission of the Department of Theatre. A continuation of PROD 311 in an intensive format, requiring extensive work of a different type or level of complexity, or demanding a higher degree of proficiency.

PROD 315 Production A (6 credits)

Prerequisite: PROD 311 and written permission of the Department of Theatre. A continuation of PROD 311 in an intensive format, requiring extensive work of a different type or level of complexity, or demanding a higher degree of proficiency.

PROD 398 Special Topics in Theatre Production (3 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PROD 399 Special Topics in Theatre Production (6 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PROD 408 Supervised Internship I (3 credits)

Prerequisite: 24 credits in degree program and written permission of the Department of Theatre. An opportunity for students to obtain credit for work completed for a recognized theatre, or a project under the joint supervision of a qualified professional and a full-time Theatre faculty member.

PROD 409 Supervised Internship II (3 credits)

Prerequisite: PROD 408 and written permission of the Department of Theatre. A continuation of PROD 408. Students repeating PROD 408 register for PROD 409 for credit.

PROD 411 Theatre Production III (3 credits)

Prerequisite: PROD 311 or 315; FFAR 250; six credits in courses outside the Faculty of Fine Arts and written permission of the Department of Theatre. Advanced assignments in the various areas of theatre.

PROD 412 Theatre Production IV (3 credits)

Prerequisite: PROD 411 and written permission of the Department of Theatre. A continuation of PROD 411, with assignments of a different type, degree of complexity, or demanding a higher degree of proficiency.

PROD 415 Production B (6 credits)

Prerequisite: PROD 312 or 315 or 411, six credits in courses outside the Faculty of Fine Arts and written permission of the Department of Theatre. Extensive assignments, requiring intensive work in various areas of advanced theatre work.

PROD 416 Production C (6 credits)

Prerequisite: 48 credits in degree program; PROD 415; six credits in courses outside the Faculty of Fine Arts and written permission of the Department of Theatre. Includes extensive assignments in various areas of advanced theatre work.

PROD 498 Special Topics in Theatre Production (3 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

PROD 499 Special Topics in Theatre Production (6 credits)

Prerequisite: Written permission of the Department of Theatre. Selected topics in theatre production.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Theatre and Development:

TDEV 201 *Telling Tales* (3 credits)

The telling of stories and tales. Students tell their own stories and those of other people. They explore individual and collective storytelling and the world's narrative storytelling. Students work on their feet to create different tales told in different ways.

NOTE: Students enrolled in a major or specialization program in the Department of Theatre may not take this course for credit.

NOTE: Students who have received credit for this topic under a TDEV 298 number may not take this course for credit.

TDEV 209 *The Artist in Community* (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department of Theatre. This course introduces students to the developmental aspects of the field, including therapeutic and social applications as they relate to personal and group development, and provides students with diverse perspectives on the artist's role in society. With an emphasis on experiential learning, opportunities are provided for practical work in the creation of original narratives, improvised role plays, and sensory and image work, towards an understanding of students' entrepreneurial potential in theatre making.

NOTE: Students who have received credit for DFHD 209 or DINE 200 may not take this course for credit.

TDEV 210 *The Audience and the Performance Event* (3 credits)

Prerequisite: TDEV 209 or written permission of the Department of Theatre. This course introduces students to theories and practical skills informing a wide range of theatre and development approaches including agit prop, group workshop, collective creation, documentary drama, issue-based theatre, and collaborative community plays. Both theory and practice are examined in the context of the relationship of the performance to its audience. Practical work focuses on collaborative group processes and the exploration of social issues through theatre.

NOTE: Students who have received credit for DFHD 210 or DINE 200 may not take this course for credit.

TDEV 298 *Special Topics in Theatre and Development* (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TDEV 299 *Special Topics in Theatre and Development* (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TDEV 302 *Theatre with Diverse Populations* (3 credits)

Prerequisite: TDEV 209 or written permission of the Department of Theatre. Design and preparation of appropriate drama or theatre activities with specific populations. Working as a team, students learn to employ community development principles in planning and implementing a theatre program with a targeted population or community group. Topics include specialized learning and teaching strategies, animation skills, needs assessment, and program evaluation. This course prepares students to carry out independent projects in upper-level courses.

NOTE: Students who have received credit for DFHD or DINE 302 may not take this course for credit.

TDEV 303 *Storytelling, Oral Histories, and Identity* (3 credits)

Prerequisite: TDEV 209 or written permission of the Department of Theatre. A course in the study and practice of the narrative tradition, from its roots in the past to today. Stories from the student's own past and that of other cultures are examined, leading to the creation and crafting of new stories and/or oral histories. Oral processes such as learning, embodying, and giving are examined in the context of audience, desired effect, and ownership. Students also gain a greater understanding of the power of listening: of hearing not only what a story says, but what it can do.

NOTE: Students who have received credit for DFHD or DINE 303 may not take this course for credit.

TDEV 311 *Popular Theatre: Theory and Practice* (3 credits)

Prerequisite: TDEV 209 or written permission of the Department of Theatre. An examination of the principles on which popular theatre is based, including objectives, approaches, and evaluation. The course provides an overview of the work of various founders (e.g. Freire, Boal), as well as pertinent theatre companies around the world engaged in social activism and the creation of opportunities for social change. Topics are approached through a mix of academic studies and the practice of specific techniques. Students may also prepare a work of popular theatre.

NOTE: Students who have received credit for DFHD 311 or for this topic under a DINE 498 number may not take this course for credit.

TDEV 312 *Theatre with Young People* (3 credits)

Prerequisite: TDEV 209 or written permission of the Department of Theatre. Using both national and international contexts, students look at various approaches to drama and theatre activities in work with children and adolescents, and examine these with reference to differences between performing for and creating with. The course provides an overview of contemporary participatory practices, both within and outside a classroom setting, and looks at these practices in the larger context of theatre for young audiences in Canada. The course has a practical component, and students will have opportunities to learn and implement age-appropriate activities.

NOTE: Students who have received credit for DFHD 312, DINE 412, or DINE 413 may take this course for credit.

TDEV 398 *Special Topics in Theatre and Development* (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TDEV 399 *Special Topics in Theatre and Development* (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TDEV 405 *Independent Study I* (3 credits)

Prerequisite: 48 credits in degree program and written permission of the Department of Theatre. Independent projects in Theatre and Development supervised by a faculty member.

NOTE: Students who have received credit for DFHD 405 may not take this course for credit.

TDEV 415 *Independent Study II* (3 credits)

Prerequisite: 48 credits in degree program and written permission of the Department of Theatre. A continuation of TDEV 405. Independent projects in Theatre and Development supervised by a faculty member.

NOTE: Students who have received credit for DFHD 415 may not take this course for credit.

TDEV 431 *Special Projects in Theatre and Development I* (3 credits)

Prerequisite: TDEV 302 and written permission of the coordinator of Theatre and Development. A lecture/lab in observing, evaluating, planning and implementing drama curricula in various locations such as innercity schools, prisons, homes for the elderly, and women's shelters. Students engage in wide-ranging and intensive fieldwork in various placements, reporting back to classmates and receiving lectures, feedback and observations on their progress from the instructor of the course.

NOTE: Students who have received credit for DFHD 431 may not take this course for credit.

TDEV 432 *Special Projects in Theatre and Development II* (3 credits)

Prerequisite: TDEV 431 and written permission of the coordinator of Theatre and Development. Continuation of TDEV 431 with a different topic.

NOTE: Students who have received credit for DFHD 432 may not take this course for credit.

TDEV 498 *Special Topics in Theatre and Development* (3 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TDEV 499 *Special Topics in Theatre and Development* (6 credits)

Prerequisite: Written permission of the Department of Theatre. The study of specialized aspects of theatre and development.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

Theatre Performance:

TPER 201 *Introduction to Acting I* (3 credits)

Emphasis on developing imagination and physical expression, including basics of improvisation, the playing of intention, and the group ensemble experience working towards presentation.

NOTE: Students enrolled in a major or specialization program in the Department of Theatre may not take this course for credit.

TPER 202 *Introduction to Acting II* (3 credits)

Prerequisite: TPER 201. This course is a continuation of TPER 201 with increased emphasis on language, character, and text.

NOTE: Students enrolled in a major or specialization program in the Department of Theatre may not take this course for credit.

NOTE: Students who have received credit for this topic under a TPER 298 number may not take this course for credit.

TPER 209 *Acting I* (3 credits)

Prerequisite: Enrolment in a program of the Department of Theatre or written permission of the Department of Theatre. An introduction to the basic principles of the acting process. Areas of study include sensory awareness, physical and vocal expression of image and intention, improvisation exercises focusing on the development of the actor's imagination, concentration, and ensemble playing. The emphasis is upon the process of making connections to images and listening to others in the theatrical space.

TPER 210 *Acting II* (3 credits)

Prerequisite: TPER 209. A continuation of TPER 209 with increased emphasis on language and text. The principles learned in the previous course are applied to dramatic text including text analysis for the actor.

TPER 231 *Theatre Movement I* (3 credits)

Prerequisite: Written permission of the Department of Theatre. Movement for the stage including such areas as centring, relaxation, mime, neutral mask, and studies in rhythm and timing.

NOTE: Students who have received credit for TPER 213 or 313 may not take this course for credit.

TPER 298 *Special Topics in Theatre Performance* (3 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TPER 299 *Special Topics in Theatre Performance* (6 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TPER 311 *Character and Text* (3 credits)

Prerequisite: TPER 210. Principles of characterization in various dramatic genre: elements of rhythm, physical and vocal attitude, language, and related improvisation techniques.

TPER 312 *Acting Elizabethan Text* (3 credits)

Prerequisite: TPER 210. Analysis of Elizabethan text and application of acting principles to the demands of verse forms.

TPER 325 *Acting Styles* (3 credits)

Prerequisite: TPER 311 or 312. This course focuses on acting styles as they relate to audience-performer relationships in dramatic genre and periods.

NOTE: Students who have received credit for TPER 411 may not take this course for credit.

TPER 331 *Theatre Movement II* (3 credits)

Prerequisite: TPER 231. Approaching character through the use of mask. The study of movement and voice aspects of character are approached through the use of half-masks. Improvisation skills are further developed.

NOTE: Students who have received credit for TPER 323 may not take this course for credit.

TPER 333 *Special Performance Studies I* (3 credits)

Prerequisite: TPER 311, 312. The study of special performance techniques such as musical theatre, clown, *Commedia dell'Arte*, and mime.

NOTE: Students who have received credit for TPER 413 may not take this course for credit.

TPER 345 *Voice and Speech I* (3 credits)

Prerequisite: TPER 210. An introduction to voice, speech, and singing skills. Vocal production, articulation, phrasing, and language analysis are taught in studio and laboratory sessions.

NOTE: Students who have received credit for TPER 215 may not take this course for credit.

TPER 355 *Voice and Speech II* (3 credits)

Prerequisite: TPER 345. A continuation of TPER 345 with greater emphasis on shaping patterns of speech, use of language for character development.

NOTE: Students who have received credit for TPER 315 may not take this course for credit.

TPER 398 *Special Topics in Theatre Performance* (3 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TPER 399 *Special Topics in Theatre Performance* (6 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TPER 431 *Theatre Movement III* (3 credits)

Prerequisite: TPER 331. Specialized movement techniques that may include such topics as Alexander, Feldenkreis, Laban, acrobatics and stage combat.

TPER 498 *Special Topics in Theatre Performance* (3 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

TPER 499 *Special Topics in Theatre Performance* (6 credits)

Prerequisite: Written permission of the Department of Theatre. This course provides opportunities for studies in selected styles or modes of theatre performance.

NOTE: Specific topics, and additional prerequisites if required, will be stated in the Undergraduate Class Schedule.

100.10 Librarians

100.20 Retired Full-Time Faculty

Section 100

100.10

LIBRARIANS

The following information was updated as of October 1, 2012.

BARON, Adam, MLIS McG., *Bibliographic and Access Librarian (Webster)*
BEASLEY, Gerald, MA Oxf., MA Lond., *University Librarian*
BEAUDRY, Guylaine, PhD EPHE, *Director, Webster Library*
BOBER, Christopher, MLIS McG., *Reference/Selection Librarian (Webster)*
BOTTER, Kathleen, MLIS W.Ont., *Systems Librarian (Webster)*
BREIER, Susie, MLIS McG., *Reference/Subject Librarian (Webster)*
CARSON, Pamela, MLIS McG., *Web Services Librarian (Webster)*
CHARBONNEAU, Olivier, MLIS Montr., *Reference/Subject Librarian (Webster)*
DENNIE, Danielle, MSc Inst.Armand-Frappier, *Reference/Subject Librarian (Webster)*
DUY, Joanna, MSc Acad., MLIS W.Ont., *Head, Access Services (Vanier)*
EDWARDS, Jean-Marc, MLIS McG., *Associate University Librarian, Information Systems and Technology*
GRAZIANO, Vince, MA York (Can.), MLIS McG., *Reference/Subject Librarian (Webster)*
GUINDON, Alex, MA U.Q.A.M., MLIS Montr., *Reference/Subject Librarian (Webster)*
HARLAND, Andréa, MLS McG., MA Qu., *Head, Interlibrary Loans (Webster)*
HOLT, Cynthia, GSLIS W.Ont., *Associate University Librarian, Collection Services (Webster)*
HUHN, Kirsten, MLIS McG., *Head, Electronic Resources and Receiving (Webster)*
JENSEN, Karen, MLIS McG., *Head, Bibliographic Access (Webster)*
JOHAL, Rajiv, MLIS McG., *Reference/Subject Librarian (Webster)*
KAPA, Dubravka, MSc Belgrade, MLIS McG., *Director, Vanier Library*
LAKE, Michelle, MLIS W.Ont., *Reference and Subject Librarian, Government Publications (Webster)*
LITTLE, Geoffrey, MLIS Tor., *Collections Librarian (Webster)*
MASSICOTTE, Mia, MLS McG., *Systems Librarian (Webster)*
MURRAY, Andréa, MA MLIS Br.Col., *Digital and Special Collections Librarian (Vanier)*
NEUGEBAUER, Tomasz, MLIS McG., *Digital Projects and Systems Development Librarian (Webster)*
POULIN, Sonia, MLS McG., *Reference/Selection Librarian (Vanier)*
REINHART, Melinda, MLIS McG., *Reference/Selection Librarian (Webster)*
THIRLWALL, David, MLS W.Ont., *Associate University Librarian, Personnel and Communications*
VILENO, Luigina, MLIS McG., *Reference/Selection Librarian (Vanier)*
WIERCINSKI, Jared, MLIS McG., *Digital Services/Outreach Librarian (Webster)*

100.20

RETIRED FULL-TIME FACULTY

The following information was updated as of October 1, 2012.

2012 Retirements

ALKASS, Sabah Toma, PhD *Lough.*, PEng, *Provost's Distinction, Building, Civil and Environmental Engineering*
AL-KHALILI, Asim J., PhD *Strath.*, PEng, *Electrical and Computer Engineering*
COLLARD, Chantal, PhD *Paris*, *Sociology and Anthropology*
FALSETTO, Mario, PhD *N.Y.*, *Cinema*
FORD, David, PhD *Ohio State*, *Computer Science and Software Engineering*
HAZELTON, Hugh, PhD *Sher.*, *Classics, Modern Languages and Linguistics (Spanish)*
HETHERINGTON, Anne, MA *C'dia.*, *Education*
LAM, Clement, PhD *Cal. Tech.*, *Computer Science and Software Engineering*
LE BRUN-GOUANVIC, Claire, PhD *Montr.*, *Études françaises*
MA, Shiping, PhD *Wash.*, *Exercise Science*
OPATRNY, Jaroslav, PhD *Wat.*, *Computer Science and Software Engineering*
REIMER, William C., PhD *Br.Col.*, *Sociology and Anthropology*
RUKMANI, T.S., PhD *DLitt Delhi*, *Religion*
SHRAGGE, Eric, PhD *Kent*, *School of Community and Public Affairs*
WEBER, Sandra, PhD *Alta.*, *Education*
ZUCKER, Carole, PhD *N.Y.*, *Cinema*

2011 Retirements

ANASTASIU, Stefan, MFA *Fine Arts Acad.Buch.*, *Cinema*
BARON, Lois J., PhD *Tor.*, *Education*
DANDURAND, Louise, PhD *Tor.*, *History*
DESPLAND, Michel, ThM ThD *Harv.*, *Provost's Distinction, Religion*
ELLIAS, Roddy, MMus *Montr.*, *Music*
GIFFORD, Robert, MA *C'nell.*, *Art History*
GUY, Richard William, PhD *Liv.*, PEng, *Building, Civil and Environmental Engineering*
JACOBS, Ellen, MEd *Tufts*, *Education*
JANS, James E., PhD *McM.*, *Psychology*
KOLAK DUDEK, Cheryl, MFA *Col.*, DA *N.Y.*, *Studio Arts*
LANGDON, Paul, PhD *McG.*, *Art Education*
PUSHKAR, Dolores, PhD *Sask.*, *Psychology*
TAYLOR, William, PhD *Montr.*, *Management*
WOODSIDE, Barbara, PhD *McM.*, *Psychology*
ZEMAN, Vladimir, PhD *Charles*, *Philosophy*

2010 Retirements

ABOU-ZEID, El Sayed, PhD *Alexandria*, *Decision Sciences and Management Information Systems*
BARAN, Boris, MSc *Wayne State*, *Decision Sciences and Management Information Systems*
BRAZINSKIS, Erika, MLS *McG.*, *Head, Bibliographic Access*
FAMIRA, Helmut F., PhD *McG.*, *Classics, Modern Languages and Linguistics (German)*
GOUANVIC, Jean-Marc, PhD *McG.*, *Études françaises*
HELMS, Nancy, MA *Calif.(Davis)*, *Theatre*
HOMZY, Andrew, MMA *McG.*, *Music*
KROL, Wolfgang, MFA *C'dia.*, *Studio Arts*
LI, Hon Fung, PhD *Calif.(Berkeley)*, *Computer Science and Software Engineering*
McKAY, John, PhD *Edin.*, *Provost's Distinction, Mathematics and Statistics; Computer Science and Software Engineering*
MURPHY, Dennis, PhD *Calif.(Santa Barbara)*, *Communication Studies*
PAIKOWSKY, Sandra, MA *Tor.*, *Art History*
QUESNEL, Louise, MSc *U.Q.T.R.*, ing., *Centre for Engineering in Society*
TANGUAY, Denise, MA *C'dia.*, *Creative Arts Therapies*
THORNTON, Patricia A., PhD *Aberd.*, *Geography, Planning and Environment*

2009 Retirements

ALBERT, Paul J., PhD *New Br., Biology*
BYERS, William P., PhD *Calif.(Berkeley), Mathematics and Statistics*
CHABOT, Thérèse, MFA *Louisiana State, Studio Arts*
DOYLE, Anna-Beth, PhD *Stan., Psychology*
HERRINGTON, Muriel B., PhD *McM., Biology*
HILLEL, Joel, PhD *Br.Col., Mathematics and Statistics*
McGUIRE, Jean, PhD *C'nell., Management*
MULLEN, Cathy, PhD *Penn.State, Art Education*
NEWMAN, Elaine B., PhD *Radcliffe, Biology*
O'CONNELL, Thomas, MBA *C'dia., Management*
O'CONNOR, Dennis, PhD *St.Louis, Philosophy*
PRUSKA-CARROLL, Marika, PhD *N.Y., Political Science*
SINGER, Martin, PhD *Mich., History*
WAGNER, Marie-France, PhD *Montr., Études françaises*
WIDDEN, Paul, PhD *Calg., Biology*

2008 Retirements

BIRD, Frederick B., PhD *G.T.U.(Berkeley), Religion*
CONNOLLY, Catherine, PhD *Wat., Applied Human Sciences*
DICKS, Dennis J., PhD *Imp.Coll.Sci.,Tech.&Med., Education*
GUÉRARD, Ghislaine, PhD *U.Q.A.M., Applied Human Sciences*
HAYES, James C., MSc *McG., Mathematics and Statistics*
JOY, Annamma, PhD *Br.Col., Marketing*
KNITTER, William, PhD *Chic., Education*
KORDA, Geraldine, MPA *U.C.L.A., MBA C'dia., Decision Sciences and Management Information Systems*
LEGROS, Dominique, PhD *Br.Col., Sociology and Anthropology*
LE VAN MAO, Raymond, PhD *Lyon, Chemistry and Biochemistry*
MARKIEWICZ, Dorothy, PhD *Ohio State, Applied Human Sciences; Psychology*
McLAUGHLIN, J. Daniel, PhD *New Br., Biology*
ORNSTEIN, Jack, PhD *Calif.(San Diego), Philosophy*
RAUDSEPP, Enn, PhD *McG., Journalism*
RUBY, Sylvia M., PhD *W.Ont., Biology*
SACCÀ, ELIZABETH J., PhD *Penn., Art Education*
STEWART, Jane, PhD *Lond., Psychology*
SWEDBURG, Randy B., EdD *Idaho, Applied Human Sciences*
THWAITES, Hal, MA *C'dia., Communication Studies*
TURNBULL, Robert, BSc *Loyola, Psychology*
VIPOND, Mary, PhD *Tor., History*
WAGSCHAL, Marion, BFA *Sir G.Wms., Studio Arts*

Equivalents Index

Section 200

Curriculum changes in the Faculty will affect some of the entries in the following list. Students should consult with their program advisor if they already have credits for a course which may be equivalent to another.

Students who have taken a given course under an old number may not repeat it for credit under an equivalent number.

NOTE: The use of "C" in the course prefix is discontinued. Unless otherwise indicated, a course previously prefixed with a C is equivalent to the identically numbered one without the C prefix.

NOTE: For old course numbers used prior to 1980-81, see Undergraduate Calendar 1984-85, or consult a program advisor.

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Anthropology			
202	C211	355	APSS 455
303 }	C362	360	LESR 360
304 }		361	LESR 361
311	368	371	LESR 371 LESR C250 LEIS C342
370	C369	380 }	APSS 490
401 }	C469	382 }	
402 }		381	LESR 381
421 }	426	383	LESR 481
422 }		384	LESR 401
424	422	421	LESR 420
430	498E	422	LESR 399A
495	C499	423 }	LESR 420 APSS 420 APSS C421
		425 }	
Applied Human Sciences		427	LESR 427 LEIS C426
220 }	APSS 313 APSS 413	431	LESR 431 LEIS C430
314 }		432	LESR 432
220 }	APSS 463	437 }	
316 }		438 }	LESR 436 LESR 464 LEIS C464
220 } { APSS 318 { APSS 418		439 }	
319 } { APSS 419 { APSS 419		443 }	LESR 440 APSS 440 APSS C441
225	APSS 415	445 }	
230 }	APSS 240 {APSS C355} APSS C351	444	LESR 336
232 }	{APSS C356}	450	LESR 450
241	LESR 241 LEIS C241	460	APSS 460
260	LESR 261 LESR 250 LEIS C250	485	LESR 485
270	APSS 250	490	LESR 490 LEIS C490
281	LESR 281 LESR 393 LEIS C393	491	LESR 491 LEIS C491
310	LESR 210, 211		
311	245 APSS 399E	Biology	
312	253 APSS 353 APSS 453	202	201
313	254 APSS 354 APSS 454	210	C205
315	256 APSS 356 APSS 456	225	298D OR {230 240
323	LESR 398N	226	298E OR {250 270
330	APSS 331 APSS 431		
333	LESR 398O	227 { 230	
340	LESR 340		240
350	LESR 350		270
351	APSS 450 { APSS 451	266	298C OR 365
	{ APSS 452	321	359

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
330	387	324 }	{ C321
334	C237	325 }	{ C322
337	C238 OR { ²³⁴ ₂₃₅ OR 398G		{ C329
341	346	327	C328
344	246	328	391
350	398A	333	233
351	454		
354	358, 453	334	{ 338 { 238
366	463		{ 339 { 239
367	262 OR 398B		{ 330
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383 }			
384 }	333 OR PSYC 358	336	{ 335
385	232		{ 435
433	332	338	{ 238
435	336		{ 239
437	338	339	{ 330
442	498		{ 337
443	498X	341	{ C342
451	352		{ C348
452	498J	375	{ 372 } 371
453	356 OR 458		{ 373 }
459	355, 431	392	{ C390 OR { C390
463	498K		{ C397 { C399
466	CHEM 479	435	336
468	498	477	479
471	498V	478	470
483	384, 333		
Canadian Studies		Classics	
220	INTE C220*	230	HIST 219
320	INTE C320*	240	HIST 223
321	INTE C321*	242	HIST 225
421	INTE C421*	266	C264 HIST C227
422	INTE C422*	267	C265 HIST C229
* Prior to 1990-91		324	C224
Chemistry and Biochemistry		325	C225
217 }	211	326 }	C320 CLAS C220
218 }		327 }	
232	332	341	241 HIST 323 HIST 224
233	334	343	243 HIST 327 HIST 226
234	{ ²³¹ ₂₃₂ } 332	354 }	254
	{ 298A }	355 }	
235	{ 331 } 332		
	{ 298B }		
271 }	C372 } C371		
374 }	C373 }		
375 }			
304	C303		
312	{ C310 } C314		
	{ C315 } C319		
		Communication Studies	
		225	326
		274	256
		276	278
		284	{ 280
			{ 282
		307	{ 305
			{ 330
		309	{ 306
			{ 331
		319	398M
		320	C205
		321	C205

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Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
231	262	391	388
233	271	393 }	445
234	275	444 }	
235	280	394	389
235	235N	394	394N
237 }	242	395	395N
238 }		452	293
243	283	471 }	478
245	385	472 }	
246	395	473	479
246	246N	474	480
247	260	480	471
249	237		
260	264, 265, 266	English as a Second Language	
261	270 257	209 }	C201
262	272 258	210 }	
302	393		
303	289 248	Études françaises	
304	312 310	FLIT 220	FRAN 220
308	C298	FLIT 230	FRAN 270
310	317	FLIT 240	FRAN 271
311	302, 307	FLIT 298	FRAN 298
311	311N	FLIT 300	FRAN 321
313 }	310, 312	FLIT 302	FRAN 322
314 }		FLIT 303	FRAN 252
318	318N	FLIT 305	FRAN 253
319	328	FLIT 308	FRAN 364
321	333	FLIT 310	FRAN 420
322	335	FLIT 312	FRAN 425
323	334	FLIT 314	FRAN 429
325	338	FLIT 316	FRAN 432
330	342	FLIT 318	FRAN 440
331	381 251	FLIT 320	FRAN 446
336	352	FLIT 341	FRAN 352
337	356 286	FLIT 343	FRAN 353
340	279 306	FLIT 349	FRAN 358
341	307 C297	FLIT 351 { FLIT 345	FRAN 356
345	392	{ FLIT 347	FRAN 357
346	305	FLIT 360	FRAN 360
349	390	FLIT 362	FRAN 256
350	459	FLIT 364	FRAN 257
351	382 248	FLIT 370	FRAN 370
355	C354	FLIT 372	FRAN 371
358	288	FLIT 374	FRAN 372
360	285 300	FLIT 382 {	FRAN 373
365	309 319	{	FRAN 374
370	287 290	FLIT 410	FRAN 421
374	370 { C376	FLIT 412	FRAN 426
	{ C377	FLIT 414	FRAN 431
376	371	FLIT 416	FRAN 435
377	372	FLIT 418 {	FRAN 438
378	375	{	FRAN 439
379	379N	FLIT 420	FRAN 441
382	288	FLIT 424	FRAN 448
390	390N	FLIT 443	FRAN 354
		FLIT 446 FLIT 445	FRAN 453

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
FLIT 447	FRAN 460	FTRA 414	TRAD 414
FLIT 449	FRAN 455	FTRA 416	TRAD 416
FLIT 450	FRAN 454	FTRA 420	TRAD 420
FLIT 451 FLIT 441	FRAN 450	FTRA 421	TRAD 421
FLIT 460	FRAN 462	FTRA 492	TRAD 492
FLIT 462	FRAN 463	FTRA 498	TRAD 498
FLIT 471	FRAN 451	FTRA 499	TRAD 499
FLIT 472	FRAN 476		
FLIT 474	FRAN 477		
FLIT 475 FLIT 480	FRAN 479	Exercise Science	
FLIT 494	FRAN 494	207	303
FLIT 495	FRAN 495	215 {	C215
FLIT 496	FRAN 496		C315, C316
FRAA 400 FRAN 330.....	FRAN 266		C413, C415
FRAA 401 FRAN 331.....	FRAN 267	218	308 {C309
FRAA 403 FRAN 333.....	FRAN 269		{C310
FRAA 404	FRAN 466	221 {	MATH 207
FRAA 405 FRAN 408 {	FRAN 404		BIOL 222
	FRAN 405		PSYC 315
FRAA 409	FRAN 409	233	333
FRAA 410	FRAN 406	257	353
FRAA 412	FRAN 407	262	C337
FRAA 413	FRAN 400	263	335
FRAA 421	FRAN 469	270	370
FRAA 422	FRAN 471	271	470
FRAA 423	FRAN 403	272	472
FRAA 430	FRAN 470	311	398E
FRAA 431	FRAN 410	321	398F
FRAA 491	FRAN 491	335	398G
FRAA 498	FRAN 498	336	398H
FRAN 307	FRAN 308	338 }	336 ... 433
FRAN 320	FRAN 334	339 }	
FRAN 332	FRAN 264	348	448, 498C
FRAN 481	FRAN 381	351	C451
FRAN 482	FRAN 382	358	C453, 456, 457
FRAN 485	FRAN 385	380	403 ... C402 498F
FRAN 488	FRAN 486	390	398I
FTRA 200	TRAD 200	414	C317
FTRA 201	TRAD 201	422	404 ... C401 498K
FTRA 202	TRAD 202	438	339
FTRA 298	TRAD 298	449	436
FTRA 299	TRAD 299	452	498S
FTRA 301	TRAD 301	454	C417
FTRA 304	TRAD 304	480	460, 499A
FTRA 310	TRAD 310	483	463, 499B
FTRA 311	TRAD 311	492	491
FTRA 398	TRAD 398		
FTRA 399	TRAD 399		
FTRA 401	TRAD 401	Geography	
FTRA 402	TRAD 402	203	SCHA 254
FTRA 403	TRAD 403	204	SCHA 253
FTRA 404	TRAD 404	270	271 { 275 { C275
FTRA 405	TRAD 405		276 { C276
FTRA 406	TRAD 406	275	C271
FTRA 408	TRAD 408	276	C271
FTRA 409	TRAD 409	290	{ 211
FTRA 410	TRAD 410		{ 271..... 275, 276
FTRA 412	TRAD 412	312	C412

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Course	Old Numbers and Equivalents		Course	Old Numbers and Equivalents	
311	401		Linguistics		
365 }	360		310	C210	
366 }			311	C211	
422 {	420		312	410	
	421		372	C370, C371	
427 {	425		400 }	411	
	430		401 }		
434 {	432	..... 431	441	SPAN 665	
	433		451	ARAB 451	
437	405				
442 }	440		Mathematics and Statistics		
443 }			ACTU 256	MATH 326, MAST 335	
461 }	460		ACTU 257	MATH 327	
462 }			ACTU 286	MATH 229	
			ACTU 357	MATH 427	
Journalism			ACTU 457	MATH 428	
203	306		ACTU 486	MATH 429	
210	C305		MAST 217	MATH 216, COMP 238	
302	C300; C301		MAST 218	MATH 262, MATH 264	
303	C301		MAST 219	MATH 263, MATH 265	
309	410		MAST 221	MATH 242	
316	310, 315		MAST 223	MATH 337	
317	310, 315		MAST 224	MATH 231, MATH 361	
318	408, 498H		MAST 234	MATH 251, MATH 282, ECON 325	
319	419, 498J		MAST 235	MATH 252, MATH 283	
330	430		MAST 330	MATH 271	
336	415		MAST 332	MATH 232, COMP 367, COMP 467	
343 {	COMS C340		MAST 333	MATH 243	
	COMS C342		MAST 334	MATH 311, MATH 354	
	COMS C343		MAST 335	MATH 326, ACTU 256	
400	C401		MATH 211	MATH 205	
402	C402		MATH 242 }	MATH 241	
421	420		MATH 243 }		
428	498M		MATH 251	MATH 282, MAST 234, ECON 325	
460	498N		MATH 252	MATH 283, MAST 235	
463	398A		MATH 262 }	MATH 261	
466	398B		MATH 263 }		
			MATH 264	MATH 262, MATH 344, MAST 218	
Liberal Arts College			MATH 265	MATH 263, MATH 345, MAST 219	
295 }	294 }	293	MATH 327 }	MATH C325	
396 }	394 }		MATH 427 }		
397	493	392	MATH 336 }	MATH C331	
			MATH 436 }		
			MATH 337 }	MATH C431	
			MATH 437 }		
Library Studies			MATH 344	MATH 262	
205 {	201		MATH 345	MATH 263	
	202		MATH 348 }	MATH C344	
322 }	324	{ 325	MATH 448 }		
323 }		{ 330	MATH 352	MATH 381	
350 {	331		MATH 354	MATH 311, MAST 334	
	345		MATH 361	MATH 231, MAST 224	
355 {	331		MATH 364	MATH 244, MATH 362	
	345		MATH 365	MATH 245, MATH 363	
433	C333		MATH 369	MATH 393	
			MATH 370	MATH 271	
			MATH 387	MATH 232	

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
MATH 464 }		362	C462
MATH 467 }	MATH C461	363	453
MATH 470	MATH 394	365	454
MATH 471	MATH 491	366	351
MATH 472	MATH 492	370	310
MATH 474	MATH 373	371	247
MATH 475	MATH 379	376	313
MATH 478	MATH 436	377 }	
MATH 496	MATH C499	378 }	376
STAT 249	MATH 242	384	334
STAT 250	MATH 243	385	335
STAT 287	MATH 329	386	312
STAT 342	MATH 342	389	347
STAT 343	MATH 343	414	422
STAT 347	MATH 347	420 }	
STAT 349	MATH 337, MATH 351	422 }	421
STAT 360	MATH 348	425	426
STAT 388	MATH 232	439	455
STAT 449	MATH 451	453	460
STAT 450	MATH 454, MATH C345	460	C360
STAT 452	MATH 353	466	457
STAT 460	MATH 443	467 }	
STAT 461	MATH 437	468 }	469 C469
STAT 480	MATH 445	470	410
		473	412
		474	417
		487	467
		488	468
		489	449
Philosophy		Physics	
210	223	245	243
212	224	290 }	295
214	321		296
220	PHIL 228, INTE 250, SCHL 250	292	397
225	326	346	344
232	241	352	252
234	242	353	354
235	248	458	456
250	240	494	495
252	230		
260 }		Political Science	
261 }	370	202 }	200
266	246		
270	211	204 }	250
314	323		
315	321	205 }	210
319	350		
324	346	206	271
326	338	211	353
327	354	307	317
330	362	309	275
332 }		310	327
333 }	331	314 }	
339	353		334
343	357	316 }	
345	358	319	233
355	348	324	231
356	349		
359	340		
360 }			
361 }	473		

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Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
348	325	WSDB 399	WMNS 399
350	314	WSDB 490	WMNS 492
351	345, 346	WSDB 491	WMNS 493
352	346	WSDB 492	WMNS 490
360	349	WSDB 493	WMNS 491
361	349	WSDB 498	WMNS 498, WMNS C491, C492
364	315	WSDB 499	WMNS 499
370	309, 369		
374	366		
375	363		
376	343		
377	367		
378	370		
379	307, 317, 344, 397....		
380	335		
397	354		
403	362		
407	394, 397		
410	C499		
496	495		
School of Community and Public Affairs			
SCPA 201 }	SCPA 300		
SCPA 203 }			
SCPA 204 (POLI 204)	{ POLI 232 POLI 234		
SCPA 205 (HIST 205)	..... HIST 205		
SCPA 210 (HIST 210)	..... HIST 210		
SCPA 211 (POLI 211)	..... POLI 211		
SCPA 215	{ ECON 201 ECON 203		
SCPA 301	..... SCPA 401		
SCPA 333 (SOCI 333)	..... SOCI 333		
SCPA 353 (SOCI 353)	..... SOCI 353		
SCPA 355 (SOCI 355)	..... SOCI 355		
SCPA 460 (COMS 460)	..... COMS 460		
SCPA 461 (COMS 361)	..... COMS 361		
SCPA 465 (COMS 465)	..... COMS 465		
Simone de Beauvoir Institute			
WSDB 290	WMNS 290, WMNS C290		
WSDB 291	WMNS 291, WMNS C291		
WSDB 298	WMNS 298		
WSDB 299	WMNS 299		
WSDB 370	WMNS 370		
WSDB 380, 480.....	WSDB 394		
WSDB 381	WSDB 398B		
WSDB 382	WSDB 398F		
WSDB 383	WSDB 398M		
WSDB 390	WMNS C393		
WSDB 393	WMNS 394		
WSDB 394	WMNS 393		
WSDB 398	WMNS 398		
		Sociology	
		203	C200
		212 }	210
		213 }	
		262 }	C260
		263 }	
		277	377
		327 }	C326
		328 }	
		329 }	C340
		429 }	
		333	C435
		336 }	C335
		337 }	
		338 }	C337
		339 }	
		355	ANTH 355
		361 }	C360
		362 }	
		374	C426
		402, 403	408 {402 403
		406 }	C405
		407 }	
		415	315 {313 314
		Spanish	
		200 or 201 or 202	{210 211
		240 or 241 or 242	{250 251
		256 }	255
		257 }	
		362 }	361
		363 }	
		365	360
		403	303
		406	407
		412	413
		421 }	431
		422 }	
		423 }	432
		424 }	
		441 }	440
		442 }	
		451	450

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Teaching English as a Second Language			
EDUC 201	{ TESL 224 TESL 327	384	{ 382 383
EDUC 454	TESL 355	387	{ 385 386
324	326	452	{ 453 454
324	{ C322 C323	493	491
330	430 498B	494	492
331	332	Urban Studies	
413	{ C411 C412	230 }	URBS 280
424	427	240 }	
424	{ C422 C423	250 }	{ GEOG 299U URBS 290
426	385 { C382 C383 C384	260 }	
433	C479	333	{ URBS 334 GEOG 399U
487	485 { C482 C483 C484	438	{ URBS 488 GEOG 438
Theological Studies		Women's Studies	
202	222	(See Simone de Beauvoir Institute)	
203	310		
204	350		
206	421		
210	{ 331 332		
217	{ 215 216		
219	{ 220 221		
222	{ 300 310		
234	372		
242	241		
265	264		
270	{ 471 472		
303	300		
320	423		
322	425		
331	430		
331 }	210 330		
332 }			
332	442		
334	440		
336	434		
340	370		
351	390 { 456 457		
362	{ 444 462		
366	466		
369	{ 468 469		

NOTE A The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits. To find out the equivalents to the listed course refer to the index below.

NOTE C The use of this note after a course description indicates that with the permission of the Department a student may take the listed course twice for credits provided that a different subject is dealt with the second time.

Course	Old Numbers and Equivalents				Course	Old Numbers and Equivalents				
Accountancy										
214	N214	211		315B, 300	243	N243	{ Psych C315 242 Econ C221 Math 241 Stat 242 }			308Z
217				{ 411A/B, 400 402 }						
220 (120)				320Z						
221 (121)				320Z	244	N244	{ 242 Econ C222 Stat 242 }			308Z
230 213	N213	211		313A/B, 300						
240 218	N216	{ Man 411 Fin 416 }		413B, 402	250	{ 313 314 315 }				
310 323	N313	411		415B, 400	253			QUAN 353		
320 326					313	N313	{ 411 QA 411 }			518Z
330 303	C403	N421		503A 421	314	N314	{ 411 QA 411 }			518Z
340 441	N441	{ Com Law 441 }		513A/B, 504	325	MANA 345				
350 414	{ N215 N315 }	{ Man 411 Fin 416 }		511B 425	350	365				
400 461	N461			509A, 507B	353	N353	Math 415			
407		407		507B	354	N354	Math 415			
420 335	C325	N314 412		419B, 408	361	316				
429	N432	431		{ 517B, 508 519B, 508 }	362	412				
					371	345				
430 422	N422				375	448				
440 442				515B, 504	378	444				
450 432		N433		431 433	381	323				
					382	327				
451	N451	{ (Computer Auditing New Name) }			384	486 427				
					385	493 417				
468	Intl Bus	C468			395	488 or 490				
470		470		560Z	425	452				
490 471		471		560Z	445		N445	442		
					446		N446	442		
					451	416				
					464	415	N415	412		
					466	414				
					477	447				
					481	424	N424	421		
					482	425	N425	422		
					484	383 423	N423		421	
					485	421				
					490	433	N433			
					492	426	N426	422		
					495	{ 482 484 }				
					496	386 483		422		
Administration										
201 (101)	N201			312Z						
202 (102)	N202			312Z						
350	MARK	C350		515Z						
Decision Sciences and Management Information Systems*										
*NOTE: The "QUAN" designation has been changed to "DESC." Formerly Quantitative Methods										
222 221										

Course	Old Numbers and Equivalents				Course	Old Numbers and Equivalents			
John Molson School of Business — COMM Courses					365	465			
215	DESC 243				368		N368	451	503B
217	ACCO 213				369		N369	451	
222	MANA 340				401				501A
224	MARK 213 & 350				405				505B
225	DESC 250				407				507A
301	DESC 222				409				509B
305	ACCO 218				447	442			
308	FINA 214 & 315				460		N460	453	511B
315	MANA 475				461		N461	453	
320	COMM 410	MANA 450			463		N463	432	
401	COMM 310	MANA 460			464		N464	433	
					465		N465	433	
					466	{ Intl Bus	N466	452	C466
					467		N467	452	
Finance					475		N475	211	502Z
200	COMM 499F				476		N476	211	502Z
210	COMM 499R				499				560Z
214	314				Marketing				
	215	N215	315, 413	407/A/B, 408	201	213 & 350			
314		N314	413	409B, 408	213		N213	{ 211, 411, 421 }	419A/B, 320
315		N315	413		350		N350	{ 211, 411, 421 }	421B, 320
320	424				351		ADMI	C350,	515
330	430	N430	424		402		N402	412,	451
350	491				405	352	N352	431	551B
370	467	Intl Bus	C467		452		N342	412,	451
385	380	440	N440	423, 426	453		N453	{ 221, 222, 431 }	523B
395	{ 390	460	N460	429	454		N454	414,	461
	{ 400	441	N441	423, 426	462		Intl Bus	C462	
401	417	N417			463		N463	481	
402	420				464		N464		
405	490	431	N431	424	465		Intl Bus	C465	
410	452	N450	423, 427	530Z	485		N485		
411	453	N450	423	530Z	491		N491		
412	419				495	490	N490		
418		N418							
450	491								
455			427						
465	455T								
470	467	Intl Bus	C467						
481	480	461	N461	429					
Management									
211		N211	{ Com Law 211						
213		N213	{ Psyc 011 211 }	Psyc C200					
	214	N214	}	Soc 211					
	215	N215							
266				466					
313					413A/B, 414				
315					415B, 414				
340		N340	430						
341		N341	430						
343	441								
345		N345	421	470Z					
346		N346	421	470Z					
362	462	N462	432						
364	464								

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NOTE A The use of this note after certain course descriptions indicates that there exists an equivalent course and the students who have credits for this equivalent course may not take the listed course for credits.

Equivalences prior to 1977-78 are not listed below. For courses with indicated equivalences

which are not listed below consult either the Department Office, the Office of Student Affairs, Faculty of Fine Arts or the Office of the Registrar.

NOTE C The use of this note after a course description indicates that the course may be repeated for credit. However, either the number or the letter preceding the number must differ.

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Art Education		Art Studio	
ARTE 220 }	ARTE 200	ARTX 280	ARTX 250, 260, 270
ARTE 230 }			
ARTE 320 }	ARTE 300	Art Theory	
ARTE 330 }		ARTT 261	ART 261
ARTE 352 }	ARTE 430	ARTT 460	ART 460
ARTE 354 }			
ARTE 432 }	ARTE 400	Ceramics	
ARTE 434 }		CERA 230	CAFT C310, C230
		CERA 330	CAFT 330
		CERA 430	CAFT 430
		CERA 450 }	CAFT C450
			ART C436
Art History		Cinema	
ARTH 200	ARTH 284, 280, 281	FMAN 202	FMAN 312, CINE C312
ARTH 260	ARTH 220	FMAN 214	FMAN 314
ARTH 262	ARTH 347	FMAN 224	FMAN 324
ARTH 263	ARTH 348	FMAN 254	FMAN 214
ARTH 264	ARTH 320	FMAN 305	FMAN 302, 303, 304, 313
ARTH 266	ARTH 322	FMAN 306	FMAN 302, 303, 304, 305, 313
ARTH 267	ARTH 234, C234	FMAN 316	FMAN 498E
ARTH 267 }	PHOT 250	FMAN 319	FMAN 498B
ARTH 359 }		FMAN 352	FMAN 498H
ARTH 268	ARTH 234	FMAN 354	FMAN 353
ARTH 290	ARTH 210	FMAN 402	FMAN 403, 414, CINE C414
ARTH 350	ARTH 320	FMAN 446, 447	FMAN 445, CINE C436
ARTH 352	ARTH 322	FMAN 448	CINE C428
ARTH 360	ARTH 339	FMAN 449	CINE C429
ARTH 361	ARTH 339	FMPR 231	CINE C311
ARTH 362	ARTH 440	FMPR 332	FMPR 331, CINE C411
ARTH 363	ARTH 441	FMPR 335	CINE C335
ARTH 364	ARTH 342, 442	FMPR 336	FMPR 334, CINE C334
ARTH 365	ARTH 443	FMPR 337	CINE C437
ARTH 366	ARTH 343	FMPR 338	FMPR 342
ARTH 367	ARTH 455	FMPR 339	CINE C433
ARTH 368	ARTH 459	FMPR 340	FMPR 242
ARTH 369	ARTH 458	FMPR 341	CINE C333
ARTH 370	ARTH 244, C444	FMPR 344 }	FMPR 336
ARTH 371	ARTH 425	FMPR 345 }	
ARTH 373	ARTH 427	FMPR 350	FMPR 498F
ARTH 388	ARTH 282	FMPR 432	FMPR 431, CINE C412
ARTH 397	ARTH 410		
ARTH 400	ARTH 484		
ARTH 401	ARTH 495		
ARTH 402	ARTH 415		
ARTH 434	ARTH 267, C234		
ARTH 499	ARTH 480		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
FMPR 438	CINE C438	Contemporary Dance	
FMPR 442	FMPR 498C	DANC 201	DANC 200
FMPR 446, 447	FMPR 445, CINE C436	DANC 205	DANC 210
FMPR 448	CINE C428	DANC 301	DANC 300
FMPR 449	CINE C429	DANC 305	DANC 310
FMST 200	CINE C200	DANC 350	DANC 398L
FMST 211	CINE C211	DANC 401	DANC 400
FMST 212	CINE C212	DANC 405	DANC 410
FMST 214	FMST 314, CINE C426	Design	
FMST 215	FMST 315, CINE C427	DART 221	} DART 200, DESI 200
FMST 217	FMST 398H	DART 223	
FMST 321	CINE C321	DART 225	
FMST 322	CINE C322	DART 229	
FMST 323	CINE C323	DART 280	} DART 260
FMST 325	FMST 498H	DART 261	
FMST 329	CINE 329	DART 262	
FMST 331	FMST 498E	DART 291	} DART 210, DESI 230, DART 290
FMST 335	FMST 398	DART 292	
FMST 343	FMST 498B	DART 331	} DART 300, DESI 311
FMST 421	FMST 324	DART 380	
FMST 422	CINE C422	DART 381	
FMST 423	CINE C423	DART 391	} DART 310, DESI 321, DART 390
FMST 425	FMST 498J	DART 392	
FMST 426, 427	FMST 425, CINE C436	DART 441	} DART 422, DESI 422
FMST 428	CINE C428	DART 442	
FMST 429	CINE C429	DART 443	} DART 424, DESI 424
Computation Arts		DART 444	
CART 211	CART 251, DFAR 251	DART 445	} DART 423
CART 212	CART 252, DFAR 252	DART 446	
CART 214	CART 254	DART 447	} DART 425, DESI 425
CART 253	DFAR 253, 353	DART 448	
CART 351	DFAR 350, 351	DART 449	} DART 410, 411
CART 352	DFAR 350, 352	DART 450	
CART 353	CART 363	DART 451	
CART 355	DFAR 355	DART 452	
CART 356	DFAR 356	DART 481	DART 498A, DART 498B
CART 357	DFAR 357	DART 491	} DART 400, DESI 411, 431, DART 490
CART 358	DFAR 358	DART 492	
CART 360	DFAR 360	Drama Therapy	
CART 361	CART 261	DTHY 301	TDEV 421, DFHD 421, DINE 420
CART 362	CART 262	Drawing	
CART 370	CART 498D	DRAW 420	ART 320
CART 411	CART 451, DFAR 450, 451	DRAW 470	ART C436
CART 412	CART 452, DFAR 450, 452	Faculty of Fine Arts	
CART 414	CART 454, DFAR 454	FFAR 250	IDYS 250
CART 434	CART 354, DFAR 354	FFAR 251	IDYS 251
CART 444	CART 498E	FFAR 252	IDYS 252
CART 453	DFAR 453	FFAR 253	FFAR 398J
CART 455	DFAR 455	FFAR 390	FFAR 399G
CART 456	DFAR 456	FFAZ 398K	FFAR 398K
CART 457	DFAR 457		
CART 458	DFAR 458		
CART 460	DFAR 460		

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Fibres			
FBRS 240	CAFT C240	INMS 252	INMS 250, MUSI 210
FBRS 260	CAFT C260	INMS 311	INMS 310
FBRS 340	CAFT C340	INMS 320	INMS C321, C322
FBRS 360	CAFT C360	INMS 351	INMS 350, 200
FBRS 370	FBRS 470, ART C440	INMS 352	INMS 350, 200
FBRS 440	CAFT C440	INMS 360	CMUS 320 CMUS C321, C322
FBRS 450	{ CAFT C450 ART C436	INMS 410	INMS C411
FBRS 460	CAFT C460	INMS 451	INMS 450, 300
FBRS 480	FBRS 460 or FBRS 440	INMS 452	INMS 450, 300
Interdisciplinary Studies		INMS 460	CMUS 420 CMUS C421, C422
IDYS 200	INRA 300	JAZZ 200	CMUS 200 CMUS 498G, 498H
IDYS 300	INRA 400	JAZZ 301	INMS 498E
IDYS 491	INRA 391	JAZZ 302	INMS 332
IDYS 492	INRA 392	JAZZ 305	CMUS 330
Interdisciplinary Studies in Sexuality		JAZZ 401	INMS 431
FASS 291	FASS 391	JAZZ 402	INMS 432
Intermedia/Cyberarts		JAZZ 405	CMUS 430
IMCA 310	VIDEO 300	JPER 220	CMUS 300
IMCA 320	EART 300	JPER 321	CMUS 401
IMCA 410	VIDEO 400	JPER 330	MPER 330
Music		JPER 341	MPER 498L
EAST 200	EAMT 399C	JPER 421	CMUS 402
EAST 203	EAMT 203 } EAMT 205, 398B,	JPER 430	MPER 430
EAST 204	EAMT 204 } 398C, 399A	JPER 441	MPER 498O
EAST 205	EAMT 205 CMUS 310	MHIS 200	{ MHIS 201 MHIS 498R MHIS 202 MHIS 498S
EAST 211	EAMT 398F	MHIS 241	MHIS 398E
EAST 231	EAMT 298A	MHIS 301	{ MHIS 311 MHIS C301 MHIS 312 MHIS 498M, C301
EAST 251	EAMT 298B	MHIS 313	MHIS 498G
EAST 252	EAMT 298C	MHIS 315	MHIS 498P
EAST 300	EAMT 399E	MHIS 316	MHIS 498N
EAST 305	EAMT 305 CMUS 410	MHIS 317	MHIS 498K
EAST 310	EAMT 399D	MPER 201	MPER 200 MPER C201
EAST 331	EAMT 399B	MPER 231	MPER 220, 221 .. MPER C201
EAST 351	EAMT 398G	MPER 301	MPER 300, 498 .. MPER C301
EAST 352	EAMT 398H	MPER 331	MPER 498K
EAST 361	EAMT 498I	MPER 332	MPER 320, 498
EAST 362	EAMT 398I	MPER 370	MPER C431, C432
EAST 365	EAMT 498G	MPER 390	MPER C330
EAST 406	EAMT 406 CMUS 446	MPER 401	MPER 400, 498
EAST 407	EAMT 407 CMUS 447	MPER 431	MPER 498Q
EAST 451	EAMT 451 } CMUS 450	MPER 432	MPER 420, 498
EAST 452	EAMT 452 }	MPER 470	MPER C433, C434
EAST 460	EAMT 498E	MPER 490	MPER C430
EAST 462	EAMT 498F	MPER 498A	MPER 431
EAST 463	EAMT 498H	MUSI 200	INMS 499D
EAST 471	EAMT 471	MUSI 265	MUSI 398A
EAST 472	EAMT 472	Painting	
INMS 209, 250	MUSI 210, INMS 498H, 499G	PTNG 420	ART 320
INMS 210	INMS 310	PTNG 430	PTNG 499A
INMS 251	INMS 250, MUSI 210	PTNG 440	PTNG 499B
		PTNG 460	ART 420, ARTH 267, C234
		PTNG 470	ART C436

Course	Old Numbers and Equivalents	Course	Old Numbers and Equivalents
Photography			
PHOT 210	{ PHOT 200 PHOT C201, C301 PHOT 221 PHOT 321, 498J PHOT 322	THEA 412	..... TPER C405
PHOT 211 } PHOT 301 }	PHOT 200	THEA 420	..... TPER C402
PHOT 311, 312	..... PHOT 310	THEA 422	..... THEA 322, C320
PHOT 321, 322	..... PHOT 320	TPER 202	..... TPER 298A
PHOT 331	..... PHOT 498M	TPER 209, 210	..... TPER 200, 201, 202
PHOT 332	..... PHOT 498K	TPER 216	..... TPER C204
Sculpture		TPER 301, 302	..... TPER 300 ... TPER 223, 224, 306 & 307
SCUL 210	..... SCUL 200	TPER 313	..... TPER 213
SCUL 310	..... SCUL 300	TPER 316	..... TPER 498P
SCUL 396	..... SCUL 398B	TPER 323	..... TPER 214
SCUL 410	..... SCUL 400	TPER 324	..... TPER 313
SCUL 450	..... ART C436	TPER 325	..... TPER 411
Theatre		TPER 333	..... TPER 413 ... TPER C406, C402
DFTT 209 } DFTT 210 }	DFTT 250	TPER 345	..... TPER 215 TPER C203
DFTT 305	..... SCEN 305	TPER 355	..... TPER 315
DFTT 315	..... SCEN 302, C310	TPER 401, 402	..... TPER 400 ... TPER 223, 224, 306 & 307
DFTT 326	..... SCEN 322	Women and the Fine Arts	
DFTT 336	..... SCEN 306	WFAR 320	..... FFAR 320, 399A
DFTT 337	..... SCEN 307	WFAR 420	..... FFAR 420
DFTT 401	..... DFTT 498Y		
DFTT 402	..... DFTT 498Z		
DFTT 414	..... SCEN 411, C410, C400, C420		
DFTT 451, 452 ...	DFTT 450		
DFTT 498	..... SCEN 498		
DINE 412	..... DINE C410		
PROD 201	..... PROD C200, C201		
PROD 311	..... PROD C302		
PROD 408	..... PROD 308		
PROD 409	..... PROD 309		
PROD 411	..... PROD C402		
TDEV 209	..... DFHD 209, DINE 200		
TDEV 210	..... DFHD 210, DINE 200		
TDEV 302	..... DFHD 302, DINE 302		
TDEV 303	..... DFHD 303, DINE 303, 202		
TDEV 311	..... DFHD 311, DINE 498F		
TDEV 312	..... DFHD 312, DINE 412 or 413		
TDEV 405	..... DFHD 405, DINE 405		
TDEV 415	..... DFHD 415, DINE 415		
TDEV 421	..... DFHD 421, DINE 420		
TDEV 431	..... DFHD 431		
THEA 211 } PROD 211 }	THEA 240		
THEA 216	..... THEA C200, C281		
THEA 303	..... THEA 300, C300		
THEA 312	..... THEA 403		
THEA 321	..... THEA C320		
THEA 404	..... THEA 304 ... THEA 300, C300		
THEA 411	..... TPER C305		

NOTE: For old course numbers used prior to 2006-07
see Undergraduate Calendar 2009-10.

Course	Old Numbers and Equivalents
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Engineering

ENGR 245 ENCS 245
ENGR 392 ENGR 492

Computer Engineering

COEN 212 COEN 312
COEN 317 COEN 417

Electrical Engineering

ELEC 264 &
364 & 365 ELEC 261 & 361 & 362
ELEC 363 ELEC 461

Mechanical Engineering

MECH 368 MECH 470
MECH 375 MECH 443
MECH 411 MECH 373

Computer Science

COMP 232 COMP 238
COMP 345 COMP 446
COMP 371 COMP 471

200.7 CREDIT FOR COURSES WITH STATISTICAL CONTENT

Some courses in statistics offered by departments in the Faculty of Arts and Science, and the John Molson School of Business have common elements, but are not necessarily equivalent. A hierarchical order has therefore been established. The possible substitution of courses for each other proceeds from top to bottom of Figure 1.

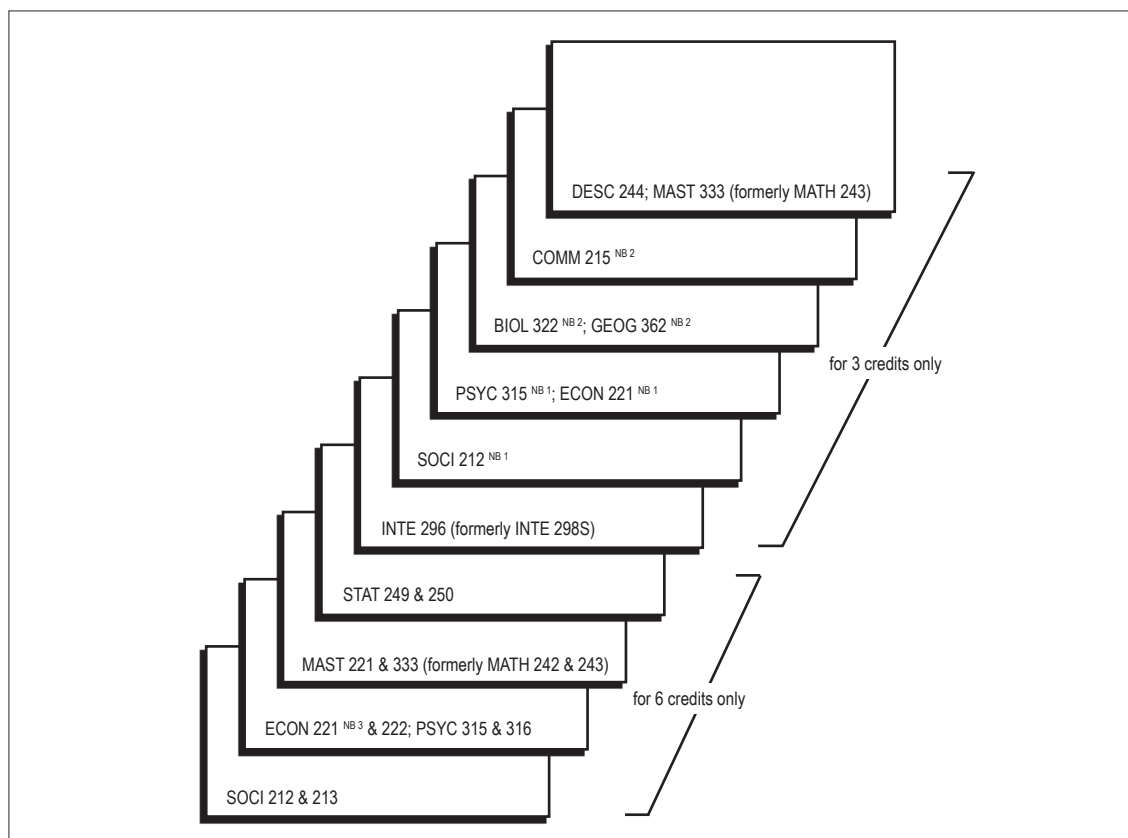


Figure1

NB 1: Students transferring to programs in Economics, Psychology or Sociology may substitute an equivalent or higher level course for ECON 221, PSYC 315 or SOCI 212 respectively.

NB 2: Students who have completed ECON 222 or PSYC 316 and transfer to programs requiring COMM 215, BIOL 322 or GEOG 362 will be exempted from these courses and may not take them for credit.

NB 3: Students who have completed SOCI 212 and 213 and transfer to the Economics program will be exempted from ECON 221 and may not take this course for credit.

No course may be substituted for any course which appears in a box above it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any other six-credit pair which is shown in the same box or in a box which is beneath it in Figure 1.

Any six-credit pair of statistics courses may be substituted for any three-credit introductory statistics course.

Any three-credit statistics course may be substituted for any course which is shown in the same box, or in a box which is beneath it in Figure 1.

No more than six credits will be awarded among the six-credit pairs, and no more than three credits will be awarded among the three-credit courses.

Awards, Prizes and Scholarships

300.1 UNDERGRADUATE AWARDS

300.2 ENTRANCE SCHOLARSHIPS

300.3 ENTRANCE BURSARIES

300.4 IN-COURSE SCHOLARSHIPS

300.5 IN-COURSE BURSARIES

Section 300

300.1 UNDERGRADUATE AWARDS

At Concordia University, undergraduate scholarships, bursaries, and awards are overseen and administered by the Undergraduate Scholarship and Awards Committee, as mandated by the Office of the Vice-Provost Teaching and Learning, and the Office of the Associate Vice-President Student and Enrolment Services. The Undergraduate Scholarship and Awards Committee is composed of a Chairperson, four faculty members, one member from Student and Enrolment Services, one Concordia Student Union member, one member of the Concordia Council on Student Life, as well as managerial staff from the Financial Aid and Awards Office. Students may hold **only one** of the following types of awards during a given academic year:

- Entrance Scholarships
- Entrance Bursaries
- In-Course Scholarships
- In-Course Bursaries

Holding more than one of these scholarships or bursaries is not allowed unless expressly authorized by the Undergraduate Scholarships and Awards Committee.

The majority of scholarships, bursaries, and awards are available to full-time students in bachelor's programs, who are Canadian citizens or permanent residents. Further information is available on the Financial Aid and Awards Office website at faao.concordia.ca. Scholarship, award, and bursary programs are active during the regular session only. Regular session is defined in §16.1.1 as the fall and winter terms of a given academic year. No scholarships, awards, or bursaries are issued during the summer term.

Full-time and part-time status for all scholarships, bursaries, and awards is determined according to candidates' credit load over the regular session only (i.e. fall and winter). Where scholarship, award, and bursary programs are concerned, summer-session credit loads cannot be combined with fall/winter credits in the determination of full-time or part-time status. In general, registration in a total of 24 credits or more during the regular session equates to full-time status, while registration in less than 24 credits equates to part-time status. As a number of scholarships, awards, and bursaries are issued in two equal instalments during the regular session (one instalment in fall, and one instalment in winter), candidates are generally advised to enrol in a minimum of 12 credits in the fall term, and another 12 credits in the winter term in order to maintain their eligibility for those scholarships, bursaries, and awards which require full-time status.

Authorized co-op work terms and exchange programs are normally considered equivalent to full-time on-campus registration. Wherever possible, clients of the Access Centre for Students with Disabilities who are registered in a part-time credit load may be considered as full-time students in the event of candidacy for scholarships, awards, and bursaries.

Scholarships

Entrance Scholarships are available to full-time students entering university studies for the first time. Candidates are selected by Faculties/Schools in co-operation with the Financial Aid and Awards Office, and in certain cases, in co-operation with academic departments as well. Selection is automatic, based on academic ranking as assigned by the University in the course of admission file processing. For some entrance scholarships, selection is based on submission of a portfolio and/or other specific materials. Only selected candidates are notified. Most entrance scholarships are available to Canadian citizens and permanent residents only; however, a growing number of these awards are open to, but not restricted to, International students.

In-Course Scholarships are available to students who have completed the previous academic year in full-time study at Concordia University. A limited number are open to part-time students. The majority are available to Canadian citizens and permanent residents only; however, a growing number of these awards are open to, but not restricted to, International students. Most in-course scholarships are automatically awarded by the Undergraduate Scholarships and Awards Committee on the basis of the student's grade point average achieved at Concordia during the preceding academic year. Some in-course scholarships require students to apply; others have additional eligibility criteria such as contribution to student life, or enrolment in a particular study discipline.

Bursaries

Entrance Bursaries are available to students entering university studies for the first time. They require completion of an entrance bursary application form, which must be submitted along with various supporting documents directly to the Financial Aid and Awards Office. Eligibility is determined following a financial needs test, a review of the candidate's academic ranking as assigned during admission application processing, and an appreciation of the applicant's personal statements on the entrance bursary application form. Most entrance bursaries are available to Canadian citizens and permanent residents only; however, a growing number of these awards are open to, but not restricted to, International students.

In-Course Bursaries are available to students who have completed at least one academic year of studies in their undergraduate program at Concordia University. The majority of in-course bursaries are restricted to full-time students; however, a limited number are open to part-time students. Most are available to Canadian citizens and permanent residents only; however, a growing number of these awards are open to, but not restricted to, International students. In-course bursaries are awarded on the basis of acceptable academic standing (minimum annual grade point average of 2.00), financial need, and applicants' personal statements. Other eligibility requirements or conditions may apply in some cases. The in-course bursary program is not open to newly admitted students in their first year of studies at the University.

Awards

Awards are generally similar to scholarships, except that they have one or more additional eligibility criteria, such as a letter of intent or an applicant statement, contribution to student life at the University, or a particular level of performance in a certain course. Most are restricted to students in particular degrees or concentrations. In many cases, there is no specific grade point average requirement, although all candidates must be in satisfactory academic standing. All awards are of the in-course type, either under the in-course scholarships or in-course bursaries rosters, open to currently enrolled students. Selection is made by the Financial Aid and Awards Office. In some cases, selection is also made on the advice of University departments, according to the eligibility specifications of each award.

External Scholarships, Bursaries, and Awards

A number of corporations, industries, and public or private organizations outside of Concordia University have various scholarships, bursaries, and award programs available to Concordia students. These external bodies include NSERC (Natural Sciences and Engineering Research Council of Canada), AUCC (Association of Universities and Colleges of Canada), and many others. Eligibility criteria vary greatly. Current and upcoming external scholarships, bursaries, and awards are described in information bulletins posted at the Financial Aid and Awards Office.

Information for New Donors: Establishing New Scholarships, Bursaries, and Awards at Concordia University

The Undergraduate Scholarships and Awards Committee and the Financial Aid and Awards Office would like to express their deepest gratitude and appreciation to the ever-growing number of donors and sponsors who provide generous support and recognition to students through the establishment of undergraduate scholarships, bursaries, and awards every year at Concordia University. These programs not only greatly contribute to the academic and personal success of students today, but they also serve as a solid foundation for tomorrow's achievements.

Donors wishing to establish new scholarships, bursaries, and awards for undergraduate students are encouraged to contact the Office of Advancement and Alumni Relations. Please visit the *Giving to Concordia* section of the main Concordia University website for information on establishing new awards, and other meaningful ways of supporting Concordia University and its students.

300.2 ENTRANCE SCHOLARSHIPS

Entrance scholarships are available to full-time students entering university studies for the first time. Candidates are selected by Faculties/Schools in co-operation with the Financial Aid and Awards Office, and in certain cases, in co-operation with academic departments as well. Selection is automatic, based on academic ranking as assigned by the University in the course of admission file processing. For some entrance scholarships, selection is based on submission of a portfolio and/or other specific materials. Only selected candidates are notified.

A number of entrance scholarships are restricted to students in particular areas of study. The majority of these awards do not require submission of an application — candidates are selected by the Faculties/Schools during admission processing. For detailed information on the awards listed below, please visit the Financial Aid and Awards Office website at faao.concordia.ca.

- Aaron M. Fish Scholarship of Excellence in Mechanical Engineering
- Amy Menon Marleau Undergraduate Entrance Scholarship
- Associates of Concordia, Alex C. Duff Scholarship
- Auchinachie Scholarship
- Bernard Lamarre Adopt-A-Student Entrance Scholarship
- Bob McDevitt Award
- Bourse d'études Hydro Québec de l'Université Concordia
- Brock McElheran Memorial Scholarship
- Bruce Le Dain Fine Arts Award
- Campaign For A New Millennium Entrance Scholarship in Arts and Science
- Canada Post Corporation Scholarships in Engineering
- Concordia University Alumni Association Entrance Scholarship
- Concordia University Hong Kong Foundation Scholarships
- Concordia University Memorial Endowment Entrance Scholarship
- Concordia University Shuffle Entrance Scholarships
- El Sakka Entrance Scholarship in Building and Civil Engineering
- Electrical and Computer Engineering Entrance Scholarship
- Fariborz and Roya Haghighat Entrance Scholarship in Engineering
- Fine Arts Adopt-A-Student Entrance Scholarship
- George Rudé Entrance Scholarship in History
- Groupe LGS Inc. Scholarships in Engineering
- Harvey Shulman Memorial Entrance Scholarship
- Henry I. Chinks Memorial Entrance Scholarship
- HSBC Bank Canada Undergraduate Entrance Award
- Jack Bordan Entrance Scholarship in Engineering and Computer Science
- John Molson School of Business Adopt-A-Student Entrance Scholarship
- John Molson School of Business International Entrance Scholarship
- Laurentian Bank Scholarship

- Leo Rice-Barker Memorial Scholarship in Journalism
- Liberal Arts College Entrance Scholarship
- Lindsay Crysler Award
- Lorne and Ann Tierney Memorial Award in Journalism
- Loyola Alumni Association Inc. Education Grant
- Loyola Foundation Inc. Entrance Scholarships
- Loyola International College Adopt-A-Student Entrance Scholarship
- Luigi Liberatore Undergraduate Entrance Scholarship
- Marie and Bob Baird Entrance Scholarship
- Maximilian Berkeley Britt Ingram Entrance Scholarship
- Normand D. Hébert Scholarships in Engineering and Business
- Prix d'Excellence en Études Urbaines Cardinal Hardy
- Provost Entrance Scholarship for the Simone de Beauvoir Institute
- Puma Canada Award
- R. Howard Webster Foundation Student Athlete Award
- Reader's Digest Scholarship in Journalism
- Richard Descarries Entrance Scholarship
- Rochefort Family Entrance Scholarship
- Ruby Stein Wagner Scholarship of Excellence in Accounting
- Salvatore Randaccio Entrance Scholarship
- Schouela Family Entrance Scholarship
- Shirley and Leo Goldfarb Entrance Scholarship
- Stan Horner Scholarship in Art Education
- Stephen Sager Entrance Scholarship
- Theatre Department Entrance Scholarship
- Vince Sirois Memorial Scholarship
- Wayne Clark Adopt-A-Student Entrance Scholarship
- Wayne Clark Entrance Scholarship in Computer Science and Software Engineering

300.3 ENTRANCE BURSARIES

Entrance bursaries are available to students entering university studies for the first time. They require completion of an entrance bursary application form, which must be submitted along with various supporting documents directly to the Financial Aid and Awards Office. Eligibility is determined following a financial needs test, a review of the candidate's academic ranking as assigned during admission application processing, and an appreciation of the applicant's personal statements on the entrance bursary application form.

Most entrance bursaries are restricted to students in a particular area of study, or they may have specific eligibility requirements. For detailed information on the awards listed below, please visit the Financial Aid and Awards Office website at faao.concordia.ca.

- 12th Floor Entrance Bursary in Biology
- Aaron Family Entrance Bursaries in Music
- Adopt-A-Student Award in Honour of Richard J. Renaud
- Angela Lonardo Bursary
- Barbara and Philip Potash Entrance Bursaries in Fine Arts
- Brian Rowland Adopt-A-Student Entrance Bursary
- Carolyn and Richard Renaud Entrance Bursaries
- Cedar Avenue Music Bursary
- Cervi-Santos Entrance Bursary
- CIBC Undergraduate Entrance Bursary
- Concordia University Alumni Association Ottawa Chapter Bursary
- Concordia University Centre for Mature Students Entrance Bursary
- CUAA John Molson School of Business Chapter Entrance Bursary
- David Crevier Adopt-A-Student Entrance Bursary
- Diane Guerrero Adopt-A-Student Entrance Bursary in Studio Arts
- Domenic Vannelli Adopt-A-Student Entrance Bursary in Communication Studies
- Edward G. Aust Entrance Bursary
- Edward Lee Hambleton Memorial Entrance Bursary
- ERA Environmental Consulting Inc. Bursary
- France Desmarais Adopt-A-Student Entrance Bursary in Exercise Science
- Gabrielle Rinfret Murphy Bursary
- George and Ricki Michals Entrance Bursary
- Giacomina Marsala Caltagirone Entrance Bursary
- Gosselin & Martin Adopt-A-Student Entrance Bursary
- Gregory Charles Wilkins Entrance Bursary
- Howard Davidson Bursary

- Irwin Puyun Ma Adopt-A-Student Bursary
- James and Catherine Dudgeon Memorial Adopt-A-Student Entrance Bursary
- Jean Charest Adopt-A-Student Entrance Bursary in Political Science
- John Molson School of Business Student Support Entrance Bursary
- John Trolli Jr. Bursary
- Joseph and Franca Borsellino Entrance Bursary
- Leonard and Bina Ellen Entrance Bursary
- Linda Renaud Adopt-A-Student Entrance Bursary In Fine Arts
- Louis and Verna Ashby Memorial Entrance Bursary
- Louis J. Duhamel Entrance Bursary
- Markl Family Entrance Bursary
- Michèle Thibodeau-Deguire Adopt-A-Student Entrance Bursary in Engineering and Computer Science
- Normand Beauchamp Adopt-A-Student Entrance Bursary
- Peter and Amy Howick Entrance Bursary
- Peter Harasty Entrance Bursary
- Pierre Morin and Josée Dupont Entrance Bursary
- Raschkowan Entrance Bursary For Students In The Fine Arts
- Ricci Family Adopt-A-Student Bursary
- Richard Lapointe Entrance Bursary
- Richard T. Stilwell Sr. Memorial Entrance Bursary
- Roger Abbott Entrance Bursary
- Ruth and David Steinberg Entrance Bursary
- Shannen Koostachin Memorial Bursary
- Silver Adopt-A-Student Entrance Bursary
- Sister Eileen McIlwaine Memorial Entrance Bursary For Single Mothers
- Stephen Lim Entrance Bursary
- Stephen Vineberg Memorial Adopt-A-Student Entrance Bursary in Fine Arts
- T.J. Madden Entrance Bursary
- The President's Award
- Vincenzo Corelli Entrance Bursary for Mature Entry Students
- Walter A. Stanford Entrance Bursary
- Zwaig Family Bursary

300.4 IN-COURSE SCHOLARSHIPS

In-course scholarships are available to students who have completed the previous academic year in full-time study at Concordia University. A limited number are open to part-time students. The majority are available to Canadian citizens and permanent residents only. Most in-course scholarships are automatically awarded by the Undergraduate Scholarships and Awards Committee on the basis of the student's last annual grade point average achieved at Concordia during the preceding academic year. Some in-course scholarships require students to apply; others have additional eligibility criteria such as contribution to student life, or enrolment in a particular study discipline.

For detailed information on the awards listed below, please visit the Financial Aid and Awards Office website at faao.concordia.ca.

- A. Frank Knowles Scholarship in Accountancy
- A. Ross Seaman Memorial Scholarships
- Ada Israel Memorial Scholarship
- Adacel Scholarship
- Alain Award in Electroacoustics
- Alberta Marston-Firing and Lars Firing Scholarship
- Alex Lawrie Memorial Scholarship
- Alexandre Quintal Co-op Student Of The Year Award
- AMS John Crawford Award
- André Bazin/George Sadoul Film Award
- Ann Duncan Travel and Tuition Award At The Leonard and Bina Ellen Art Gallery
- Ann Kerby Scholarship for Students With Disabilities
- Anne M. Galler Memorial Scholarship
- Arts & Science Grad Class Program Graduating Student Award
- Association of Alumni of Sir George Williams University Inc. Scholarships
- Athletic Therapy Award of Excellence
- Balvir and Ranjna Singh Memorial Scholarship In Economics
- Bank of Montréal Undergraduate Scholarships
- BCA Research Scholarship in Finance
- Bergeron Family Undergraduate Co-op Scholarship
- Bessner Gallay Kreisman Accounting Scholarship
- BPW Montréal Judith Litvack Women's Scholarship
- Brenda Carter and David Wheeler Memorial Award

- Brian Slack Award in Urban Studies
- Brian T. Counihan Scholarship for Outstanding Contribution to Student Life
- CAE Scholarships in Engineering Excellence
- Campaign For a New Millennium ENCS Scholarship
- Campaign for a New Millennium Student Contribution Scholarship
- Canadian Irish Studies Foundation Scholarships
- Canadian Women's Press Club (Montréal Branch) Scholarship
- Carol and Bruce Mallen Award for Cinema Entrepreneurship
- Cathy Watt Award in Vocal Studies
- Cecil Buller - John J.A. Murphy Scholarship in Drawing
- Centre Desjardins Scholarships in Corporate Finance
- Charles Ellison - Stanley Aléong Award for Jazz Studies
- Classics, Modern Languages & Linguistics Scholarship
- Colors of Concordia Award
- Commerce and Administration Students' Association Awards
- Compton-Lamb Memorial Scholarship
- Concordia University 25th Anniversary Scholarship
- Concordia University Alumni Association Inc. Scholarship
- Concordia University Retired Faculty and Staff Scholarships
- Concordia University Staff-Endowed Scholarship
- Concordia University Used Book Fair Scholarship
- Couleur Jazz Award in Music
- Crevier-Bronstetter Award
- Cynthia Gunn Journalism Award
- D. L. Stevenson Colour Scholarship
- Daniel Harrison International Work Term Grant
- Danielle Morin Award
- Dave Campbell Award of Distinction in Athletic Therapy
- David Abramson Scholarship
- David Frost Memorial Scholarship
- de Sève Cinema Scholarships
- Deans Knight Capital Management Scholarship
- Deirdre Annis Mark Award for Translation Studies
- Don Arioli Award
- Don McGillivray Memorial Prize in Explanatory Journalism
- Donald L. Boisvert Scholarship for Gay and Lesbian Studies
- Dowan Kwon Memorial Adopt-A-Student Scholarship
- Dr. Alex Vincent Scholarship in Psychology
- Dr. Ed Enos Athletic Excellence Award
- Dr. Oscar Peterson Jazz Scholarship
- Dr. Paul Fazio Building Engineering Undergraduate Award
- Dr. Ronald Calderisi Scholarship in Biochemistry
- Dr. Vana Andreou and Family Student Scholarship
- Eric Harrison Memorial Prize
- Eric Poteet Scholarship in Finance
- Faculty of Engineering and Computer Science Student Life Award
- Faculty of Fine Arts Development Fund Scholarships
- Father Francis O'Brien Football Award
- Frank B. Walker Journalism Awards
- Friends of Concordia Scholarship
- Fuller Landau Best Student Paper Award
- Fuller Landau Scholarship in Accounting
- Garnet Menger Award
- Gary Cummings Award of Distinction in Athletic Therapy
- Genivar Inc. In-Course Scholarship
- George and Helen Economides Scholarship
- Georgian Hockey Award In Memory of Paul Lemire
- Gerald, Maria, and Georginia Daoussis Scholarship
- Gianni Forlini Award
- Glencross Family Award in Art Education
- Goldie and Joe Raymer Travel Fellowships
- Gordon Ritchie Scholarship
- Gregory John Barker Award
- Gunther Brink/Petro-Canada Scholarship
- Harry and Grace Colle Scholarship

- Harry Clinch Award in Geography
- Heather and Erin Walker Humanitarian Award
- Heather Walker Memorial Scholarship
- Helen McNicoll Art Prize Established by Betty Ann Elliott
- Henry F. Hall Scholarship
- Henry Gamer Award for Acting
- Howard Gilmour Scholarship
- Hugh and Trudi Le Caine Award in Electroacoustics
- Inspec-Sol Scholarship
- Instructional Technology Award
- Irving Layton Awards
- Jaan Saber, Phoivos Ziogas Memorial Scholarship
- Jack L. Cummings Scholarships
- Jad Saleh Student Life Award in Engineering
- James McQueen Scholarship
- Jean-François Bourassa Memorial Award
- Jeri Brown Vocal A Cappella Performance Adopt-A-Student Scholarship
- John Molson International Business Association Scholarship
- John N. and Sophia Economides Scholarship – John Molson School of Business
- John N. and Sophia Economides Scholarship in Engineering and Computer Science
- John N. and Sophia Economides Scholarship in the Humanities and Social Sciences
- John N. and Sophia Economides Scholarship in the Natural Sciences
- John W. O'Brien Scholarship
- John W. Sancton Memorial Award
- Ken Cavanagh Memorial Award
- Kit Brennan Playwriting Award
- Kornblatt Scholarships
- La bourse d'excellence Marthe Catry-Verron
- Lanie Melamed Memorial Award in Applied Human Sciences
- Laurie Brodrick Scholarship
- Le Château Stores Scholarship
- Leah Sherman Award in Art Education
- Leon Cynader Scholarship In The Sciences
- Leslie and Kaye Jowett Scholarship
- Lewis Harris Memorial Award
- Liberal Arts College In-Course Scholarship
- Lillian S. Robinson Memorial Scholarship in Women's Studies
- Lise-Hélène Larin Scholarship in Drawing
- Lois and Stan Tucker Scholarship
- Loyola Alumni Association Inc. Education Grant
- Lucien N. Rossaert Memorial Scholarship
- Lucille Irvine Memorial Scholarship
- Magil Construction Ltd. Scholarships
- Magnus Flynn Scholarship
- Mair Verthuy Scholarship
- Marie-Rose Durocher Scholarship
- Marlene Pring Memorial Scholarship
- Matthew Czerny Award
- Max and Jessie Kaufman Memorial Scholarship in Judaic Studies
- McGrath-Smith Memorial Scholarship
- McLean Budden Scholarship
- Mel Hoppenheim Award
- Mike King Memorial Scholarship
- MIX 96 - Nick Auf der Maur Memorial Scholarship
- Morneau Shepell Student Scholarship
- Nabil Esmail Undergraduate Excellence in Engineering Scholarship
- Nadia Gagliano Student Teaching Award
- Nancy and Jack Ditkofsky In-Course Scholarship
- Nawaf Al-Rufaie Scholarship in Communication Studies
- Nicholas Racz Memorial Scholarship
- Norman McLaren Film Animation Scholarship
- ONExONE Foundation First Peoples Undergraduate Scholarship
- Ordre des CGA du Québec Scholarships in Accountancy
- P.T.R. Pugsley Memorial Scholarship
- Pageau, Morel et Associés Scholarship

- Pariso Scholarships in Communication Studies
- Patrick Phelan and Adelina Giannascoli Scholarship In Memory of Danny Phelan
- Paul Arsenault Award
- PEAK Financial Group Scholarship
- PepsiCo Award For Top Athletes
- Peter Glasheen Memorial Scholarship
- Peter Matthews Memorial Scholarship
- Pierre Jasmin Undergraduate Award for Excellence in Animation
- Pizza Pizza Integrated Marketing Award
- Political Science Jean H. Picard Foundation Scholarships
- Prix d'Excellence en Études Urbaines Cardinal Hardy
- Professor Carmine Di Michele Scholarships
- Professor Mervin Butovsky Memorial Award
- Project Hero Scholarship
- Provost In-Course Scholarship for the Simone de Beauvoir Institute
- PSB Boisjoli Accounting Scholarship
- Radu Zmeureanu Scholarship
- Rassemblement des Chrétiens du Moyen-Orient (RCMO) Award
- Reebok-CCM Hockey Awards
- Reverend John C.T. Johnson Memorial Scholarship
- Richard J. Renaud Athletic Awards
- Richard Laurence Weldon Scholarship
- Richard M.H. Cheng Award
- Richter, Usher, and Vineberg Scholarship
- Robert Daniel Ball Memorial Award
- Robert V. Tucker Memorial Award
- Rogers Sportsnet Scholarship
- Ron Meisels Scholarship
- Ross Perigoie Memorial Scholarship
- Ruby Stein Wagner Award of Excellence in Accounting for Entrepreneurial Businesses
- Russell Breen Scholarship
- Ruth Louise Vaughan Memorial Scholarship
- Ryan F. Cianflone Memorial Award
- Samson Bélair / Deloitte & Touche Scholarship
- Sandhya and Swati Sharma Memorial Scholarship
- Sandra and Leo Kolber Scholarships in Cinema
- Sean Wall Scholarship
- Silas Katz Memorial Scholarship
- SNG Collins Barrow Accountancy Co-op Award of Excellence
- Sophie de Villers Memorial Scholarship
- SR Telecom Scholarship
- Stacie Lee Bessner Memorial Scholarship
- Stan Heaps Scholarships
- Stelcner Family Prize
- Stelvio Software Engineering Excellence Scholarship
- Steve Metaxas Scholarship in Finance
- Surface 3 Award In Design
- Susan Levin-Woods Scholarship
- Susan Pigott Memorial Award
- Susan Schouten Documentary Film Award
- Tau Kappa Epsilon Fraternity 40th Reunion Award
- TD Insurance Meloche Monnex Scholarship
- The Alcides Award in Electroacoustics
- The Edge Award
- Theatre Animal Scholarship
- Theresa Humes Award for Women's Hockey
- Tony Proudfoot Award
- Trevor W. Payne, C.M. Scholarship in Black Music
- Vincent, Olga, and Denis Nicolas-Diniacopoulos Scholarships
- William K. Everson Award
- William Schiff Scholarship
- Xerox In-Class Case Competition Award
- Zeidan Family Scholarship
- Zlatko Grgic Award

300.5 IN-COURSE BURSARIES

In-course bursaries are available to students who have completed at least one academic year of studies in their undergraduate program at Concordia University. The majority of in-course bursaries are restricted to full-time students; however, a limited number are open to part-time students. In-course bursaries are awarded on the basis of acceptable academic standing (minimum annual grade point average of 2.00), financial need, and applicants' personal statements. Other eligibility requirements or conditions may apply in some cases. The in-course bursary program is not open to newly admitted students in their first year of studies at the University.

Many in-course bursaries are restricted to students in a particular area of study, or they may have specific eligibility requirements. For detailed information on the awards listed below, and for information concerning the availability of this year's in-course bursary application, please visit the Financial Aid and Awards Office website at faao.concordia.ca.

- 12th Floor In-Course Bursary in Biology
- 2011 Graduating Class In-Course Bursary
- 2012 Graduating Class Adopt-A-Student Bursary
- Alfred Pinsky Emergency Bursary
- All-Canadian Football Achievement Bursary
- Al-Ramli and Al-Jajeh Adopt-A-Student Bursary
- Andrea Bolger Bursary
- Anna Nack Adopt-A-Student Bursary for the Liberal Arts College
- Arab World International Bursary
- Arianne Johnston-Kip Little Memorial Bursary
- Association of Alumni of Sir George Williams University Inc. Bursaries
- Bank of Montréal Undergraduate Bursaries
- Barbara and Philip Potash In-Course Bursaries in Fine Arts
- bfinance Bursary In Political Science
- Birks Family Foundation Bursaries
- Boire Bursary for Single Parents
- Brahm and Jo Jo Gelfand Bursary
- Bruno and Stella Lebel Fine Arts Bursary
- Buddy Shizgal Abrams Memorial Bursary
- C.J. Hewitt Awards
- C.J. Kouvertaris Bursary In Hellenic Studies
- Campaign for a New Millennium Student Contribution Bursary
- Canadian Forest Navigation Bursary
- Carolyn and Richard Renaud In-Course Bursaries
- Cecilia Crysler Award
- Chadha Family Foundation's Indo-Canadian Award
- Christopher Jackson Bursary
- Cinmar Adopt-A-Student Bursary
- CN Undergraduate In-Course Bursary in Supply Chain Operations Management
- Concordia Memorial Golf Tournament Endowed Bursary
- Concordia University Alumni Association Inc. Bursaries
- Concordia University Part-Time Faculty Awards
- Concordia University Retired Faculty and Staff Bursaries
- Concordia University Shuffle In-Course Bursaries
- Concordia University Student Support Emergency Bursary
- Cornelia Bingulac Emergency Bursary for Part-Time Students
- Damon Hartung Memorial Bursary
- David Kreiner Vaillancourt Award
- David Schwieger Bursary
- Derek C. Hannaford Bursary
- Di Palma-Piperni Family Bursary
- Donald Buchanan Bursary
- Donald L. Peets Bursary
- Dr. Ben Weider Bursary
- Dr. Henry P. Habib In-Course Bursary
- Dr. Irving R. Tait Bursary
- Ecosense and Concordia University Alumni Association Inc. Bursary
- Ellen Greenwood Ornstein Memorial Bursary
- Emergence of the Chief Bursary
- Emilia Di Raddo Bursary In Accountancy
- Engineering and Computer Science Graduating Class Bursary
- Ernest Haznoff Memorial Bursary
- Ethel Campbell-P.E.O. Memorial Bursary

- F.P. Higgins Memorial Bursary
- Faculty of Fine Arts Development Fund Bursaries
- First Nations, Métis, and Inuit Bursary
- Francine Reid Memorial Bursary
- Fred Weinstein Bursary
- Friends of Concordia Bursary
- Fuller Landau In-Course Bursary
- George and Henry Tutsch In-Course Bursary
- George Balcan Bursary for Painting and Drawing
- Gino Martel Bursary in Taxation
- Grace and Alphonse de Rosso Memorial Bursary
- Great-West Life Business Education Award
- Havie Chinks Bursary in Theatre
- Henry P. Habib Undergraduate Bursary in Political Science
- Ho-Lin Mark Undergraduate Bursary in Computer Science and Software Engineering
- Hugh Haugland Memorial Bursary
- Idées au Cube Bursary
- Imaflex Inc. And Friends JMSB Bursary
- In Soo Kang Adopt-A-Student Bursary in Sociology
- International Student In-Course Bursary
- ITT Flygt Bursary in Engineering
- J.P. Copland Memorial Bursary
- Jack Bermingham Memorial Bursary
- Jack Lehman Bursary
- Jacqueline Desmarais Adopt-A-Student Bursary in the Performing Arts
- Japanese Canadian Memorial Bursary
- Jean Amiouny Bursary
- Jean-Paul Vallée/Royal LePage Bursary
- Jeffrey David Skowronski Dramatic Arts Bursary
- Joel Jeffrey Birenbaum Memorial Bursary
- John E. Parisella Family Bursary
- John Freund Bursary
- John Jackman Bursary
- John Jessop Memorial Bursary
- John M. Gardiner Award
- John Molson Accounting Society In-Course Accounting Bursary
- Jonathan and Susan Wener Bursary
- Joseph Gilbert Joyce Memorial Bursary
- Keith Shrouder Bursary in Accounting
- Kevin O'Mara Memorial Bursary
- Kornblatt Bursaries
- Latin American Student Organization Adopt-A-Student Bursary
- Laura Tilson Memorial Adopt-A-Student Bursary
- Library Staff in Support of Students Bursary
- Linda Ghan Memorial Bursary
- Loretta Mahoney Memorial Bursary
- Louis Goldstein Memorial Bursary
- Louise Rouselle-Trottier In-Course Bursary
- Louise Rousselle Trottier Bursary In Arts and Science
- Loyola Class of '57 Bursary
- Loyola Foundation Inc. Bursaries
- Loyola International College Adopt-A-Student Bursary
- Maria Ildiko Beardsley Memorial Bursary
- Marie-Rose Durocher Bursary
- Marjorie McInnes Grant Cooper Bursary
- Marjorie S. Dewitz Bursary
- Mark Philip Michaud In-Course Bursary
- Mark Roberts Tinker Bursary
- Maurice Gold Memorial Bursary
- McEvoy Family Bursary
- Michel A. Tozzi Family In-Course Bursary
- Miqdadi Family Adopt-A-Student Bursary
- Mireille and Murray Steinberg Awards
- Miriam Aaron Roland Emergency Bursary
- Morley and Rita Cohen Foundation Bursaries

- Mr. and Mrs. Vern DeGeer Bursary
 - Myer F. Pollock Bursary
 - Nancy Torbit Memorial Bursary
 - Nathan H. Messer Bursaries
 - Nick and Vickie Vouloumanos Bursary
 - Nick Auf der Maur Award
 - Nicole Ouellette and Lucie Masson Bursary
 - Nissan Canada Inc. Award in Automotive Engineering
 - Office of University Advancement and Alumni Relations Bursary
 - ONExONE Foundation Undergraduate Bursary For First Peoples
 - Patrick Tansey Memorial Bursary
 - Peter Glasheen Memorial Bursary
 - Phil Chiarella Adopt-A-Student Bursary
 - Professor James Gilchrist Finnie Bursary
 - Ralph B. Hood Memorial Bursary
 - Rita de Santis Adopt-A-Student Bursary
 - Robert Boisjoli Family Bursary
 - Robert Harris Pallen Memorial Bursary
 - Robert Strauber Bursary
 - Roslyn and Harry Pinker Endowment Fund
 - Royal Albert Edinburgh Lodge Bursary
 - Ruth Richer Bursary
 - S.H. McNeilly Bursary
 - School of Extended Learning (SEL) Staff Adopt-A-Student Bursary
 - Senator John J. Connolly Bursary
 - Shirley Hobbs Memorial Adopt-A-Student Bursary
 - Shushie Adopt-A-Student Bursary
 - South Shore University Women's Club Bursary
 - St. Andrew's Society Bursary
 - Tammy Bedford and Garry Byng Memorial Bursary
 - TD Bank Financial Group Bursary
 - Theodore Ronis Memorial Bursary
 - Thomas J. Fisher Bursary
 - University Women's Club of Montréal Bursary
 - Usha and Jagdish Patel International Student Exchange Program Bursary
 - Vincenzo Corelli In-Course Bursary for Mature Entry Students
 - William Colfer Memorial Bursary
-

Graduate Programs

Section 400

400

GRADUATE PROGRAMS

Interim Dean of Graduate Studies
PAULA WOOD-ADAMS

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The graduate programs offered by the University are divided into doctoral, master's, diploma and certificate programs. Doctoral programs offer students the opportunity to carry out fundamental and applied research. The results of this research are presented in the form of a thesis containing an original contribution to knowledge. Master's and doctoral theses are defended in public examinations.

The length and specific format of a doctoral thesis is discipline dependent. All doctoral programs require the passing of comprehensive examinations and a minimum of 90 credits of study. At the master's level, the University offers a variety of thesis and non-thesis options. All master's programs require a minimum of 45 credits. Some master's programs also have a comprehensive examination.

The academic goals of the graduate diploma programs are somewhat different from those of doctoral and master's programs. They are designed either to offer a further specialization in a field or discipline already studied at the undergraduate level, or they provide the introduction to a new field of study or discipline, with the express intent to develop some level of specialized knowledge. A graduate diploma consists of a minimum of 30 credits and normally a maximum of 33 credits. Diploma programs do not require a thesis, although a graduating essay, project or report may be required.

Graduate certificates are designed to use existing departmental graduate resources to serve a professional clientele which is seeking an upgrading and advanced graduate training over a short time frame. The normal academic base for graduate certificates is the graduate courses presently offered by an academic department, configured in a way to serve the needs of the clientele. The focus of the certificate program should be directed to the needs of the professional clientele; it will be specialized in scope rather than being of a general nature. A graduate certificate usually consists of 15 credits.

With the exception of the individualized doctoral and master's programs, all graduate programs offered by the University are administered by a particular academic department or program in one of the four Faculties of the University. All graduate programs are described in the School of Graduate Studies Calendar. Each description outlines admission requirements, application procedures, degree requirements and program options. In most cases, courses are given in the late afternoon and evening, or in the evening only, making it possible for both full-time and part-time students to attend. Please contact the graduate program director for further information.

Students may choose to receive their degrees in either the gender neutral nomenclature of Baccalaureate, Magisteriate, and Doctorate or the traditional nomenclature of Bachelor, Master, and Doctor.

For a listing of graduate program directors and assistants, please visit: graduatestudies.concordia.ca/graduateprogramdirectors/gpdlist.

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Section 500

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2013

April

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December

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2014

April

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December

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